

WIKIMEDIA FOUNDATION

DESKTOP IMPROVEMENTS STUDY

FOR NEW AND CASUAL ENGLISH READERS

January 24th, 2020



WIKIPEDIA
The Free Encyclopedia

HUREO | USER
RESEARCH
COMPANY

ABOUT THE STUDY

The Wikimedia Foundation was interested in learning the experience of readers on desktop Wikipedia. The study focused on various aspects of desktop reading including welcomeness of Wikipedia, credibility of Wikipedia and readers trust, and the readability.

We conducted an in-person study with 24 participants in our lab in Pune, covering 12 new and 12 casual readers as defined by Wikipedia.



EXECUTIVE SUMMARY

-
1. WHAT DID READERS LIKE ABOUT WIKIPEDIA?
 2. WHAT WERE READERS' CHALLENGES WITH WIKIPEDIA?
 3. WHAT DO READERS WISH FOR?

WHAT DID READERS LIKE ABOUT WIKIPEDIA?



1

INFORMATION AT ONE PLACE

The readers liked that Wikipedia contained in-depth information about every topic and they did not have to visit any other websites for information.

2

IMAGES

The readers liked that the article contained images as they could relate it with their topic. They also felt that images elevated the look of the site.

3

TABLE OF CONTENTS

The readers liked that they could directly read about their topic from the table of contents.

4

LANGUAGES

The readers liked that they had an option of changing the language and read in their regional languages.

5

NO ADVERTISEMENTS

The readers liked that the page contained no advertisements.

WHAT WERE READERS' CHALLENGES WITH WIKIPEDIA?



1

TOO MUCH INFORMATION

The readers found the content of the page overwhelming and did not feel like reading the article.

2

MAIN MENU

The readers were unable to understand the purpose of the Menu on the left hand side of the site. They felt that it was not relevant for them.

3

ARTICLE TOOLS

The readers could not understand the terminology and concept of most of the article tools.

WHAT DO READERS WISH FOR?



1

MORE IMAGES & VIDEOS

The readers wanted to see more images in the article. Some of them also wanted to see videos related to their topic embedded in the article.

2

MORE SEGREGATED INFORMATION

The readers wanted to easily search for or find the information that is relevant in terms of what they want to read. They wished the information to be more segregated.

3

EASE OF NAVIGATION

The readers wanted to be able to go back to the Table of Contents or other places within the site without scrolling too much.

4

EASY TO ACCESS TABLE OF CONTENTS

Some readers mentioned that they would like to see the contents table in the form of tabs on the top. Some of them wanted to see it on the left side of the page instead of the main menu.

5

MORE COLORS

The readers wanted to see more colors and background color on the page.

CONTENTS

—

1 **METHODOLOGY & PARTICIPANTS**

2 **FINDINGS**

3 **APPENDIX**

METHODOLOGY & PARTICIPANTS

Study Goals | Methodology | Participant Profiles

STUDY GOALS

Understanding and establishing a baseline of how new and casual Wikipedia readers feel towards Wikipedia in regards to:

- 1 WELCOMENESS**
To understand the initial feelings of readers towards the site.
- 2 CREDIBILITY AND TRUST**
To understand the impressions of trust towards the site, and how the readers compare it with other sites.
- 3 READABILITY**
To evaluate the understanding of terminology and concept of the main menu/sidebar (especially the article tools), and the user tools.

METHODOLOGY: IN-DEPTH INTERVIEWS

Number of Participants: We interviewed 24 participants in total.

Duration: Each session lasted 45-60 minutes.

Method:

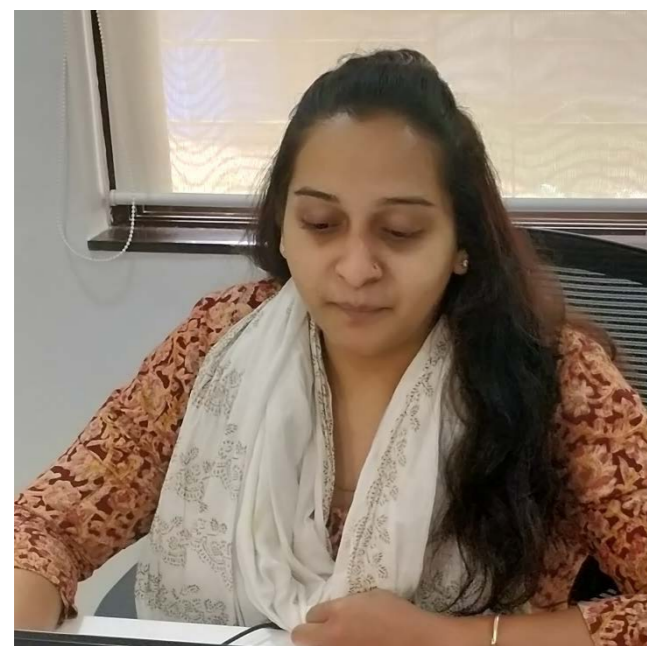
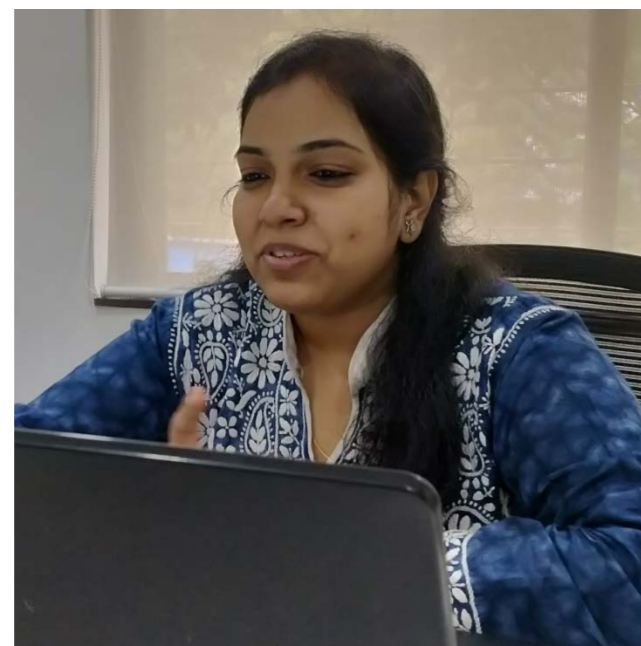
- We conducted an in-depth, in-person study in our lab in Pune. We created a script based on predefined goals to test welcomeness, credibility, and readability of Wikipedia. During the session, participants were interviewed about their online reading, laptop usage, feelings towards the Wikipedia site, challenges and wishlist.
- The devices that we tested included desktop browsers.



Researcher conducting a session with a participant.

PARTICIPANT PROFILES

Who were the participants of the Wikipedia Desktop study?



Age & Gender

All participants were within the age group of **20 to 40** years and included **both genders**.

Professions

Participants were diverse backgrounds such as **students, engineers, housewives, supervisors, etc.**

Devices

Participants were using smart phones – **Android and iOS**. Other devices they used were **tablets, laptops, and some used desktops** at work.

Online Reading

Participants were reading news, technical articles, blogs, travel-related information and research papers. They were reading on sites like **Quora, Wikipedia, DailyHunt, Udemy, News18, Byjus** etc.

FINDINGS

- 1. READERS – NEW & CASUAL**
- 2. WELCOMENESS**
- 3. CREDIBILITY & TRUST**
- 4. READABILITY**

FINDINGS

1. READERS – NEW & CASUAL

2. WELCOMENESS

3. CREDIBILITY & TRUST

4. READABILITY

SECTION 1: READERS – NEW & CASUAL

1. WHO IS A WIKIPEDIA DESKTOP READER?

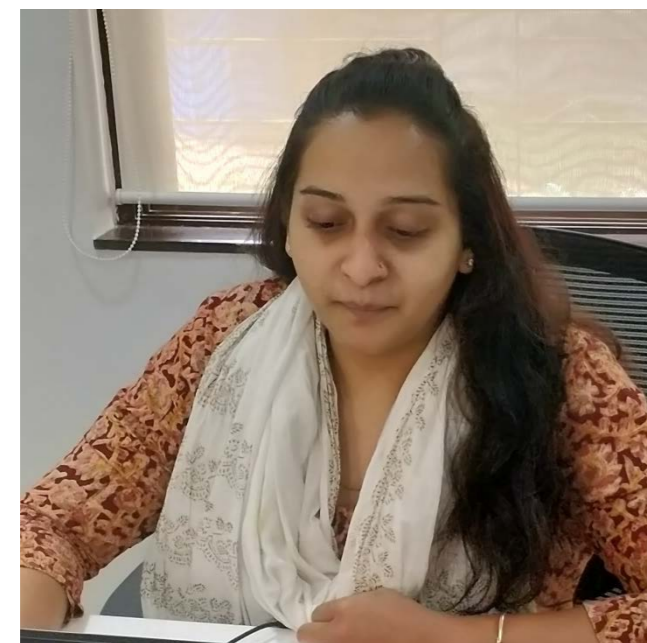
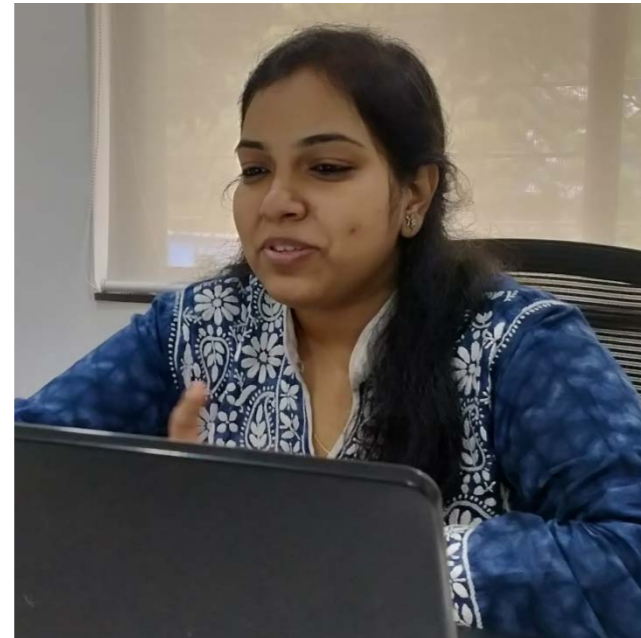
WHO IS A WIKIPEDIA DESKTOP READER?

—

A Wikipedia Desktop reader reads online in English and is technologically savvy. They are from diverse backgrounds such as student, professionals, and homemakers.

We have divided them into two groups – **New Readers and Casual Readers.**

CASUAL READERS



STUDENT



PROFESSIONALS

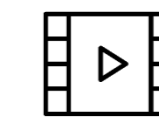
e.g.: medical, engineer, business

What Languages Do They Read Online?

Aa

English

What Is Their Device Usage?



Social Media, Reading, Watching Videos



Use both Laptop and Phone frequently

Where Do They Seek Information?



Through Social Media, Through advertisements, Google Search

Where Did They Learn About Wikipedia?



In School or College through their friends or teachers

CASUAL READERS

How Did They Find These Sites?



Google Search, Friends or Family,
Reference Links in Articles

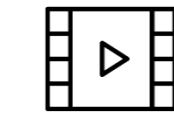
What Are They Using Wikipedia For?

- General Knowledge
- Search For Specific Information
- Research Aid
- Use The Information For Project Work

What Sites Do They Use?



Wikipedia.org, Quora.com, Wattpad.com



YouTube.com, Netflix.in



Mostly global websites such as Coursera.org, Udemy.com, Scholar.Google.co.in, Pubmed.gov, StuffYouLook.blogspot.com, Behance.net, StackOverflow.com



DailyHunt.in, theBetterIndia.com, YourStory.com



Amazon.in, Ajio.com, Koovs.com, Myntra.com



TravelTriangle.com, Holidify.com, LonelyPlanet.com

NEW READERS



STUDENT



PROFESSIONALS

e.g.: supervisor, receptionist



HOMEMAKER

What Languages Do They Read Online?

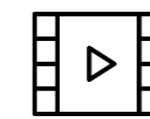
Aa

English

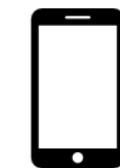
अ

Regional languages

What Is Their Device Usage?



Social Media, Working, Watching Videos,
Project Work, Reading



Use Phone frequently
and Laptop rarely

Where Do They Seek Information?



Through Social Media, Through
advertisements, Google Search

Where Did They Learn About Wikipedia?

Are aware of Wikipedia but mostly have not used it

NEW READERS

How Did They Find These Sites?



Google Search, Online Advertisements,
Friends or Family

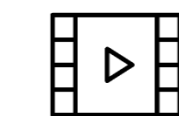
What Are They Using Wikipedia For?

- Sometimes, they have used the information for project work of their kids

What Sites Do They Use?



Mostly watching videos than reading



YouTube.com



Mostly local websites such as Guru99.com, Byjus.com



TimesofIndia.in, IndiaTimes.com, MoneyControl.com



Amazon.in, BigBasket.com, Grofers.com

Differences Between Casual & New Readers

- The new readers are watching more videos than reading, as compared to the casual readers who are doing both.
- The new readers use more local websites as compared to the casual readers who are using more global websites.

FINDINGS

1. READERS – NEW & CASUAL

2. WELCOMENESS

3. CREDIBILITY & TRUST

4. READABILITY

SECTION 2: WELCOMENESS

1. WHAT DO READERS SEE & FEEL UPON LANDING?
2. WHAT ARE THE FACTORS AFFECTING WELCOMENESS?
3. WHAT SITES DO READERS COMPARE WIKIPEDIA WITH?



1. WHAT DO READERS **SEE & FEEL** UPON LANDING?

—

There are differences in how the new readers and the casual readers see the Wikipedia site on landing. However, all of the readers understood that the purpose of Wikipedia is to provide information on vast number of topics.

WHAT DO THEY SEE ON THE SITE?

CASUAL READERS

The screenshot shows the Wikipedia article for Pune. Annotations are placed as follows:

- 4**: Points to the Wikipedia logo and navigation menu on the left sidebar.
- 2**: Points to the title "Pune" and the introductory paragraph.
- 3**: Points to the "Contents" table of contents.
- 1**: Points to the "Pune Poona" section header and the "Metropolis" sub-header.

The page content includes the following text:

Pune Wikipedia, the free encyclopedia

This article is about the city in Maharashtra, India. For its namesake district, see Pune district. For other uses, see Pune (disambiguation). "Poona" redirects here. For other uses, see Poona (disambiguation).

Pune (Marathi pronunciation: [pʊɳɐ]; English: /ˈpuːnə/;^{[20][21]} also called **Poona**, the official name until 1978)^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

The city is considered to be the cultural capital of Maharashtra.^{[30][31]} It is also known as the "Oxford of the East" due to the presence of several well-known educational institutions.^{[32][33]} The city has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune.^{[34][35]} Research institutes of information technology, education, management and training attract students and professionals from India and overseas. Several colleges in Pune have student exchange programmes with colleges in Europe.^[36]

Coordinates: 18°31'13"N 73°51'24"E

Pune Poona

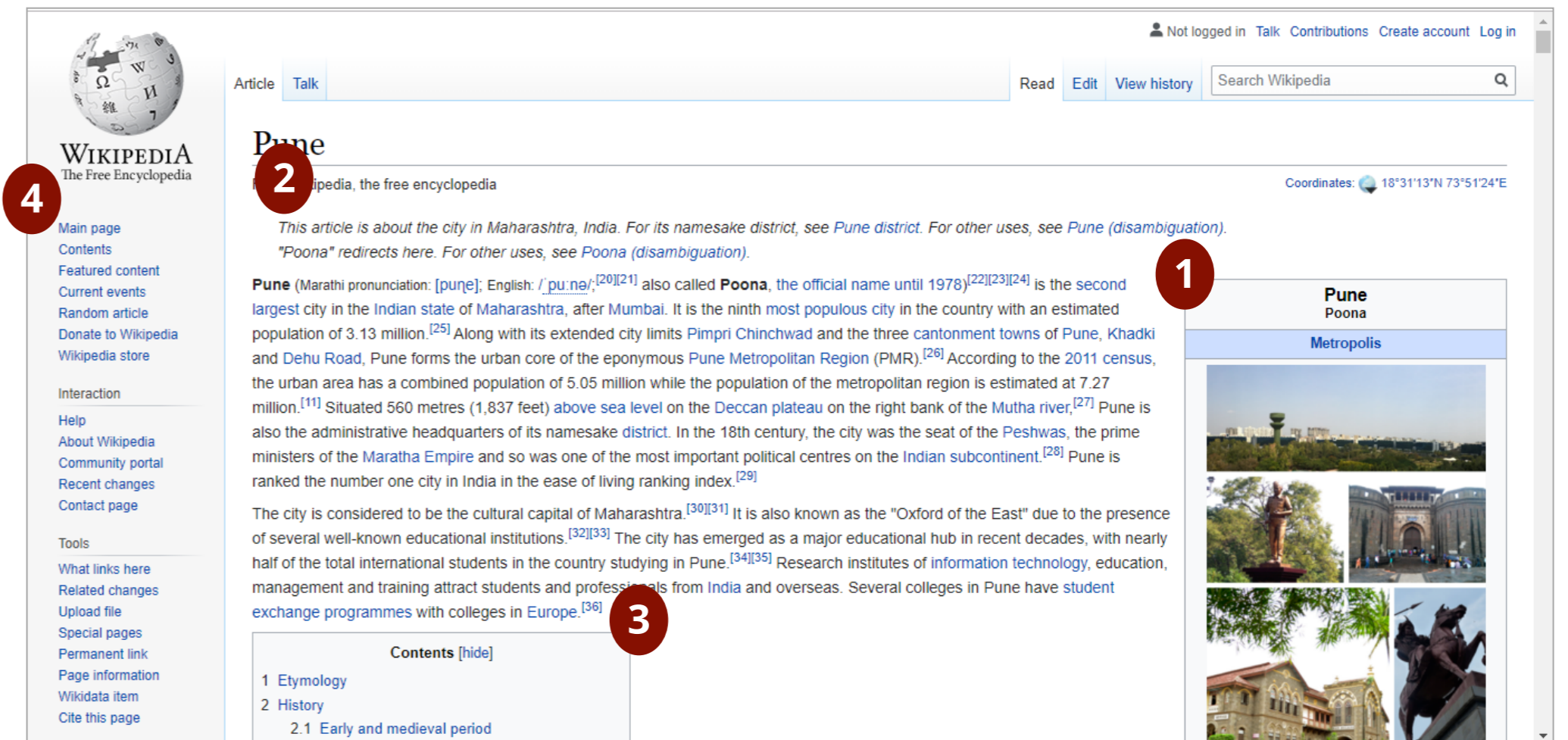
Metropolis

Contents [hide]

- 1 Etymology
- 2 History
 - 2.1 Early and medieval period

WHAT DO THEY SEE ON THE SITE?

CASUAL READERS



1 Images

They first see the images and information on the left hand side of the page.

2 First paragraph

Some of the readers read the first paragraph and then go to the Table of Contents.

3 Table of Contents

Some of them directly go to the Table of Contents and click on the topic that they are interested to read.

4 Main Menu

Almost all of the readers do not see the Menu on the left hand side.

HOW DO THEY FEEL ABOUT WIKIPEDIA? CASUAL READERS



The casual readers related to Wikipedia as follows:

- **“The look & feel of Wikipedia has not changed over time”**

The casual readers were used to reading the Wikipedia site since school or college days and felt that the look of Wikipedia has been the same since then.

- **“Wikipedia provides information for all types of people”**

They felt that the main purpose of Wikipedia was to make information accessible for everyone and would refer to Wikipedia for information.

- **“Maybe Wikipedia could become a little more trendy”**

Some of the casual readers also mentioned that Wikipedia could evolve as per the modern websites they visit - in terms of more visual elements like photos or videos, and less or segregated content.

WHAT DO THEY SEE ON THE SITE?

NEW READERS

1



- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia
- Wikipedia store

Interaction

- Help
- About Wikipedia
- Community portal
- Recent changes
- Contact page

Tools

- What links here
- Related changes
- Upload file
- Special pages
- Permanent link
- Page information
- Wikidata item
- Cite this page

Article **Talk**

Read **Edit** View history

Not logged in [Talk](#) [Contributions](#) [Create account](#) [Log in](#)

Pune

3

Wikipedia, the free encyclopedia

Coordinates: 18°31'13"N 73°51'24"E

This article is about the city in Maharashtra, India. For its namesake district, see [Pune district](#). For other uses, see [Pune \(disambiguation\)](#). "Poona" redirects here. For other uses, see [Poona \(disambiguation\)](#).

Pune (Marathi pronunciation: [pʊɳe]; English: /ˈpuːnə/^{[20][21]} also called **Poona**, the official name until 1978^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

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Contents [\[hide\]](#)

- 1 Etymology
- 2 History
 - 2.1 Early and medieval period

2

Pune
Poona

Metropolis



WHAT DO THEY SEE ON THE SITE?

NEW READERS

1 Entire page

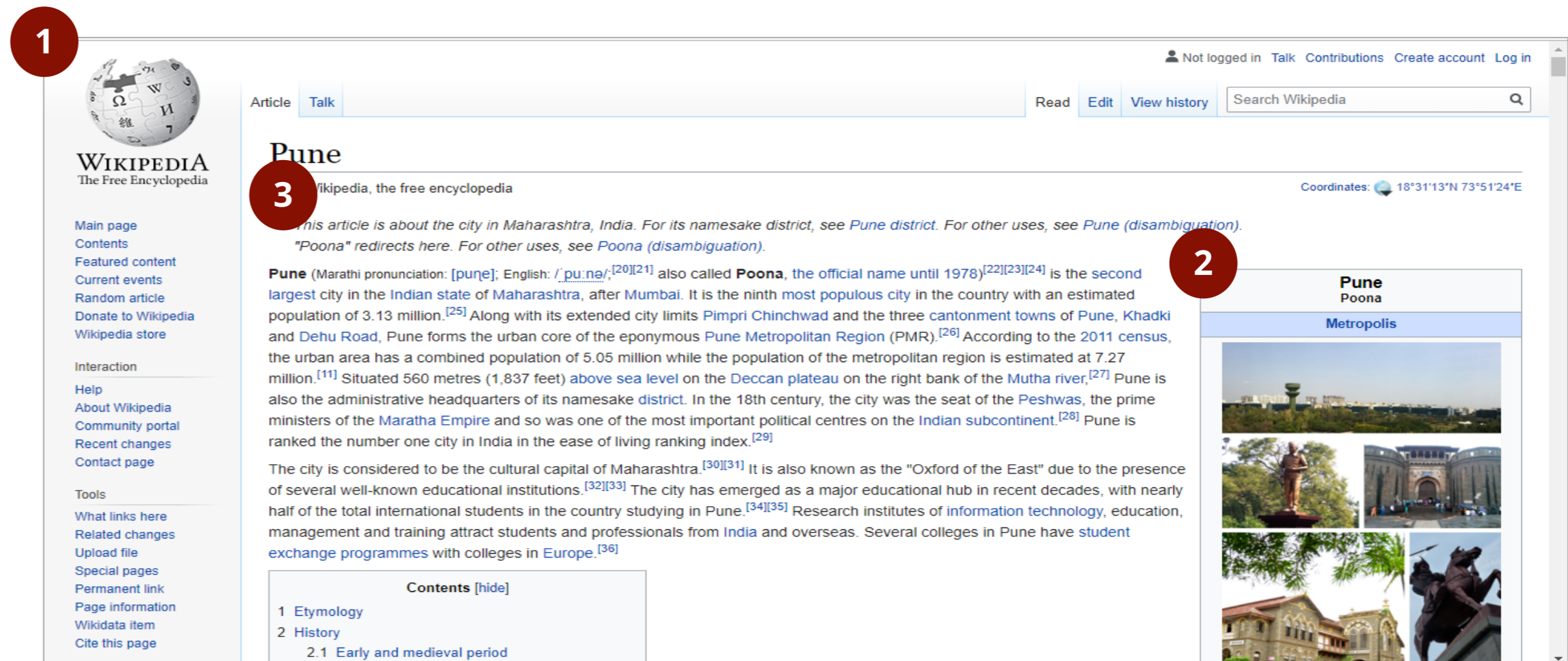
Most of the readers see the whole page upon landing.

2 Images

Most of them see the images and information on the right hand side of the page.

3 First paragraph

Some of them read the first paragraph or go the Table of Contents and view the topics that are listed.



HOW DO THEY FEEL ABOUT WIKIPEDIA? NEW READERS

—
The new readers related to Wikipedia as follows:

- **“Wikipedia has not been used other than for project work”**

Some of the new readers had either heard about Wikipedia or had previously referred to it for some information/project work.

- **“Other websites provide information in pieces unlike Wikipedia”**

They felt that Wikipedia included detailed information about each topic at one place and liked that would not have to go to any other website for finding content.

2. WHAT ARE THE FACTORS AFFECTING WELCOMENESS?

		WORKED	STRUGGLED
1	IN-DEPTH INFORMATION	✓	
2	READABILITY	✓	✗
3	INFOBOX	✓	
4	NO ADVERTISMENTS	✓	
5	CONTENT WITH IMAGES/VIDEOS	✓	
6	UI ELEMENTS (Colors, Fonts)	✓	✗
7	MAIN MENU		✗



WORKED

1. IN-DEPTH INFORMATION

Most of the readers liked that Wikipedia shows them enough content – It keeps them engaged.

In Depth Information

Most of the readers liked that each article in Wikipedia gives **in-depth and new information at one place.**

References

Some of them liked that the **site contained references** which they could refer for more information.

Hyperlinks

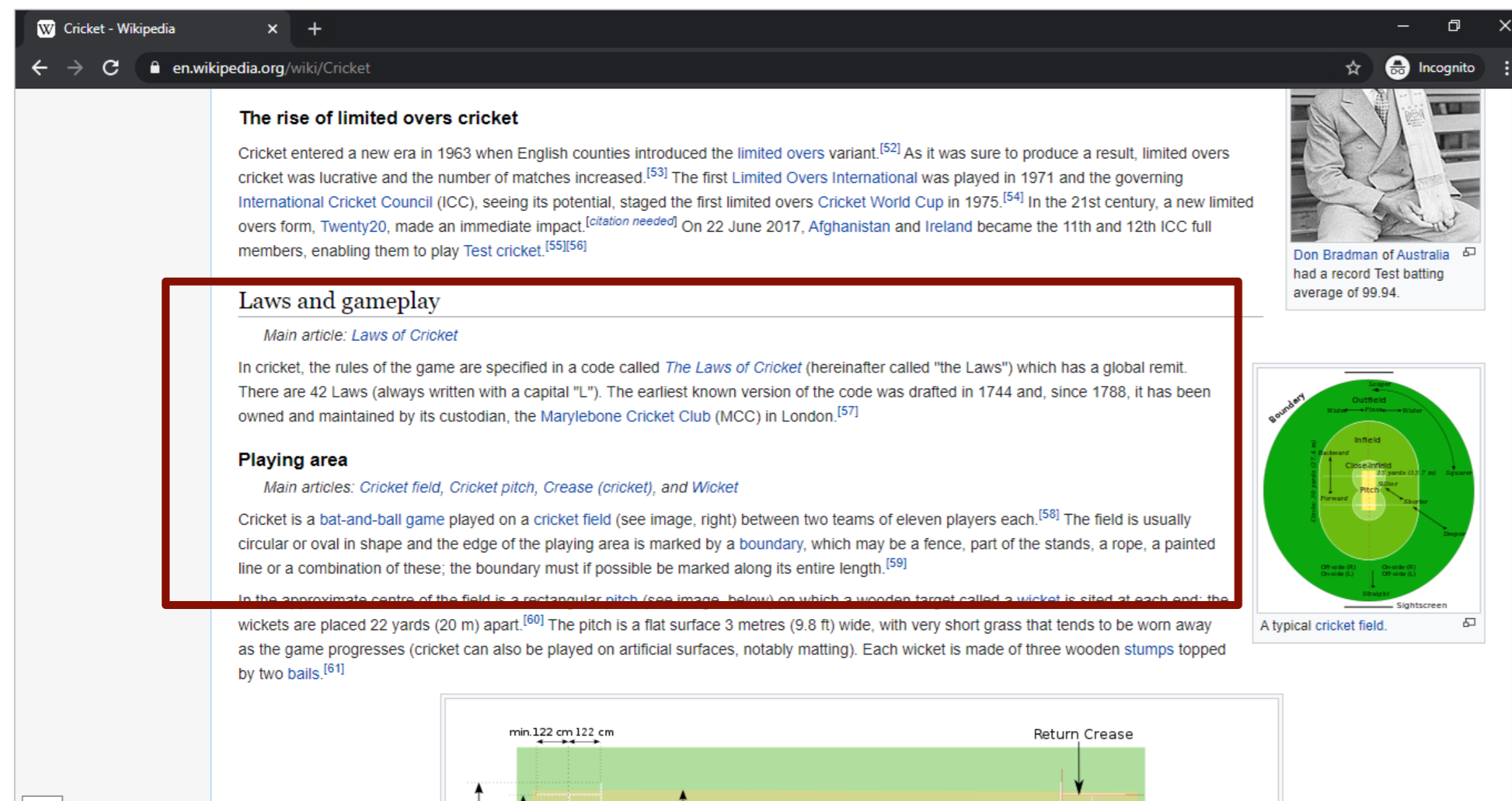
Some of them liked that the site had **hyperlinks** which will contain in-depth information about other topics as well.



WORKED

2. READABILITY: CATEGORIZATION OF INFORMATION

Some of the readers liked that the article was divided into different categories. (for example, 'History', 'Culture', etc.)





STRUGGLED

2. READABILITY: AMOUNT OF INFORMATION

Most of the readers felt that the amount of information on the site is a lot.

Difficult To Search Content

Most of the readers felt that it is difficult to find the relevant topic from the article.

Not All Topics Are Relevant

Readers wanted to see only specific content in which they were interested.

Too Much Information To Read

Some readers did not feel like reading as there was too much information on the page.



WORKED

3. INFOBOX

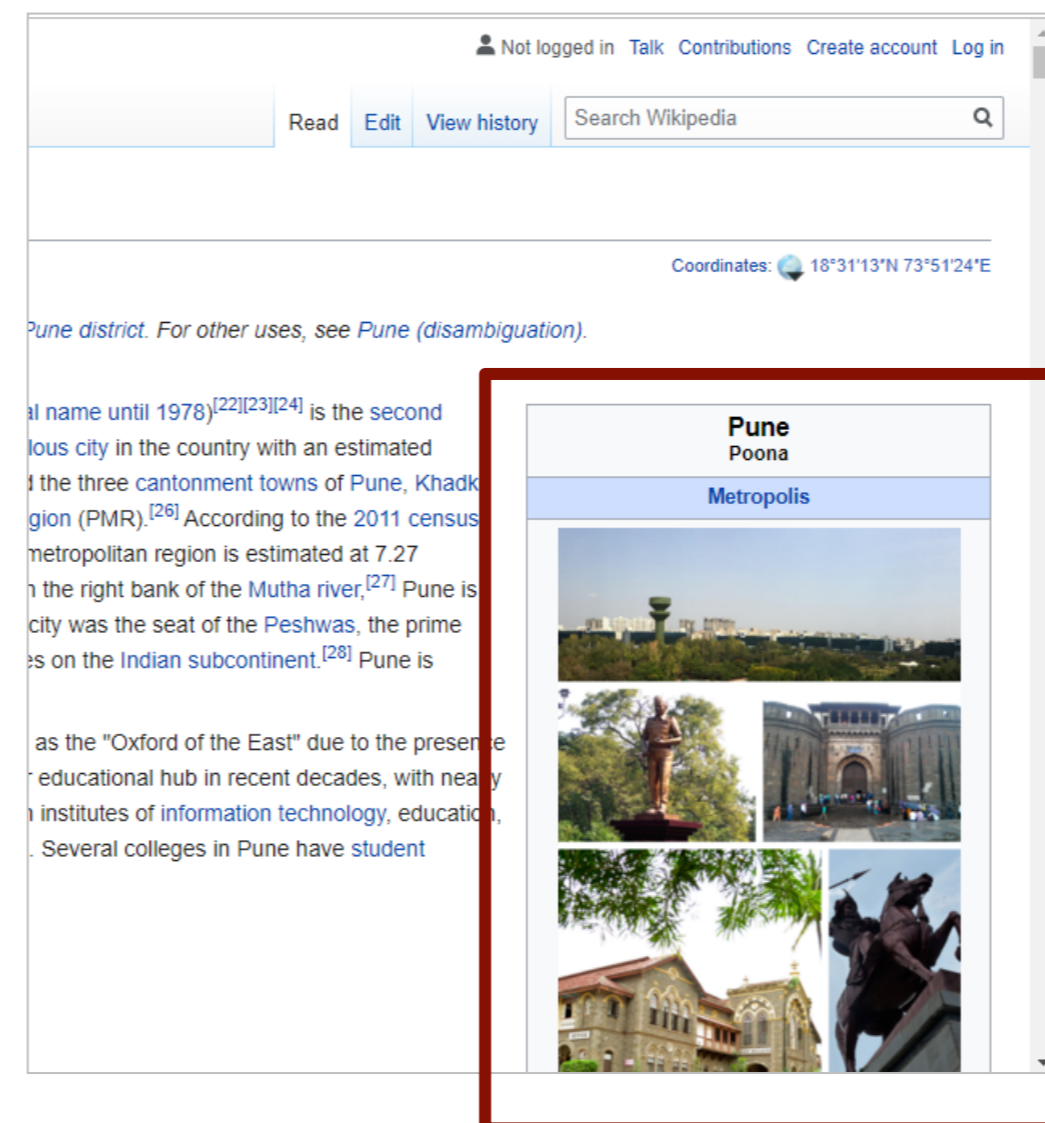
Most of the readers who explored the Infobox liked that they could get quick information about the topic.

Reference Image

They liked that they could immediately see a reference image of their topic in the right side column.

Highlighted Concise Information

They also liked that they could read basic information in bullet points.





WORKED

4. NO ADVERTISEMENTS

- Most of the readers liked that there were no advertisements on the Wikipedia website.
- A few of them compared the website positively to education websites where they have to pay subscription for an advertisement-free experience.



Wikipedia does not remind me of any other website. This is ad-free. Other websites showing me a periodic table will show me ads. So the Wikipedia page is good to see. I use Study Shaala which shows ads and says 'pay us to subscribe to us'.

*- Casual Reader
User Three*



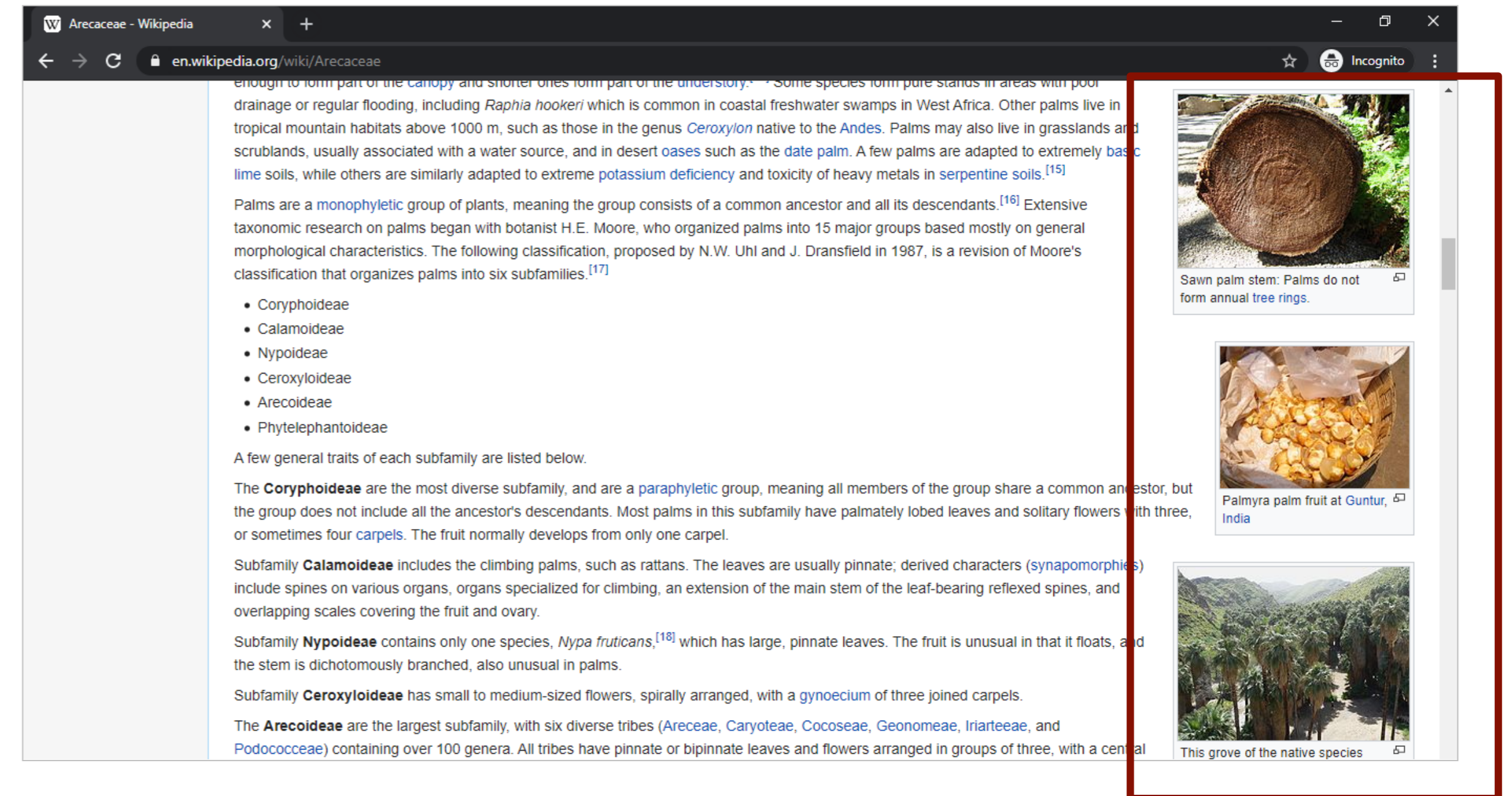
WORKED

5. CONTENT WITH IMAGES/VIDEOS

Most of the readers liked that the page contained images.

Quick Understanding

The images helped in understanding the topic better. Readers felt that **adding related videos** to the site will give them a quick understanding of the topic.



6. UI ELEMENTS

—

Certain elements influenced the Welcomeness for the readers – these received a mixed positive and negative response. The elements were as follows:

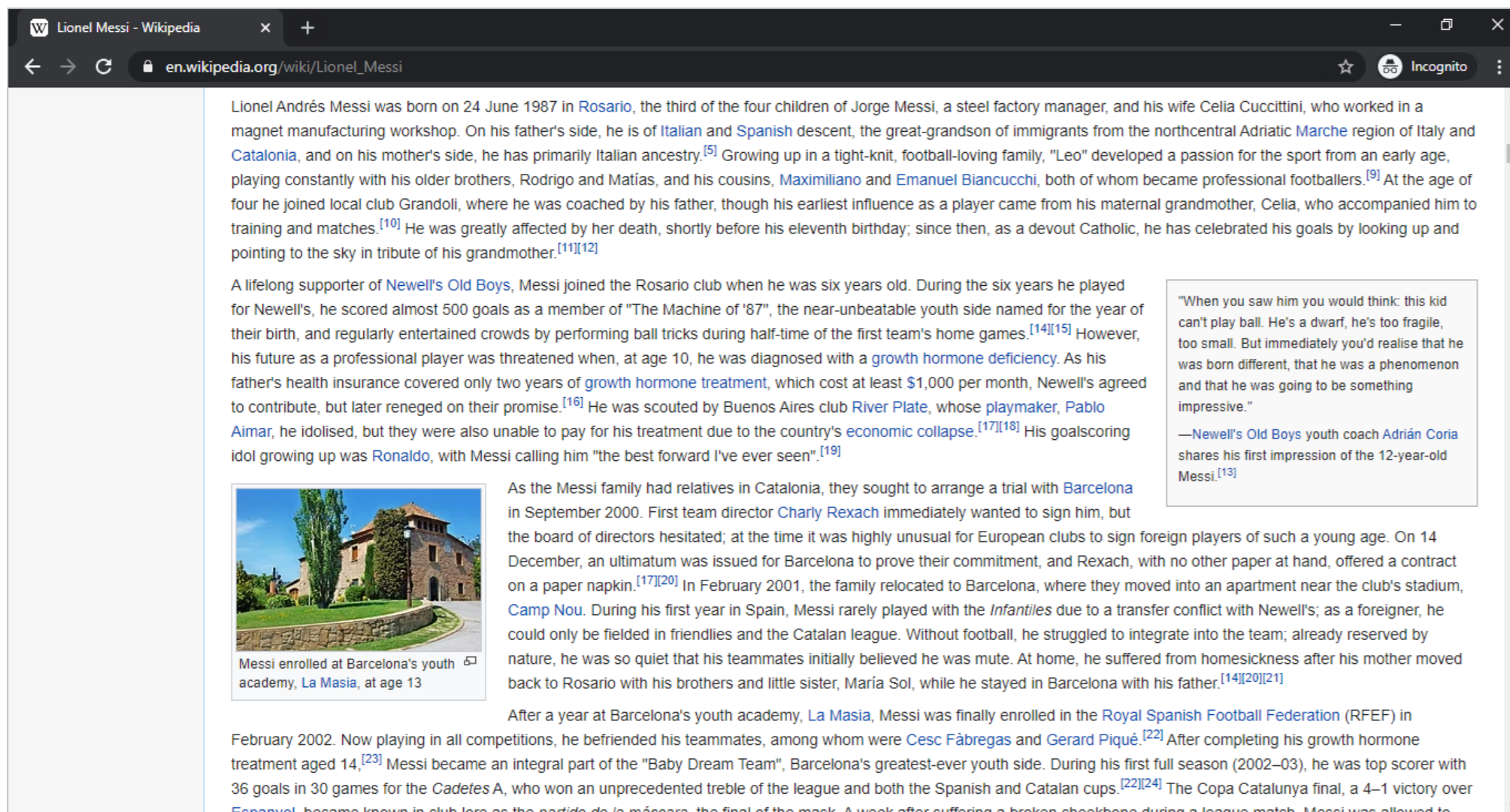
1 Colors

2 Fonts



6. UI ELEMENTS

COLORS

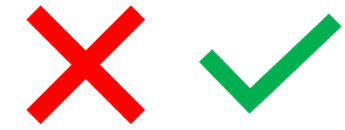


WORKED

Some of the readers liked that the page looked minimalistic with black and white colors.

STRUGGLED

Some of the readers found the article page boring due to lack of colors.



6. UI ELEMENTS

FONTS

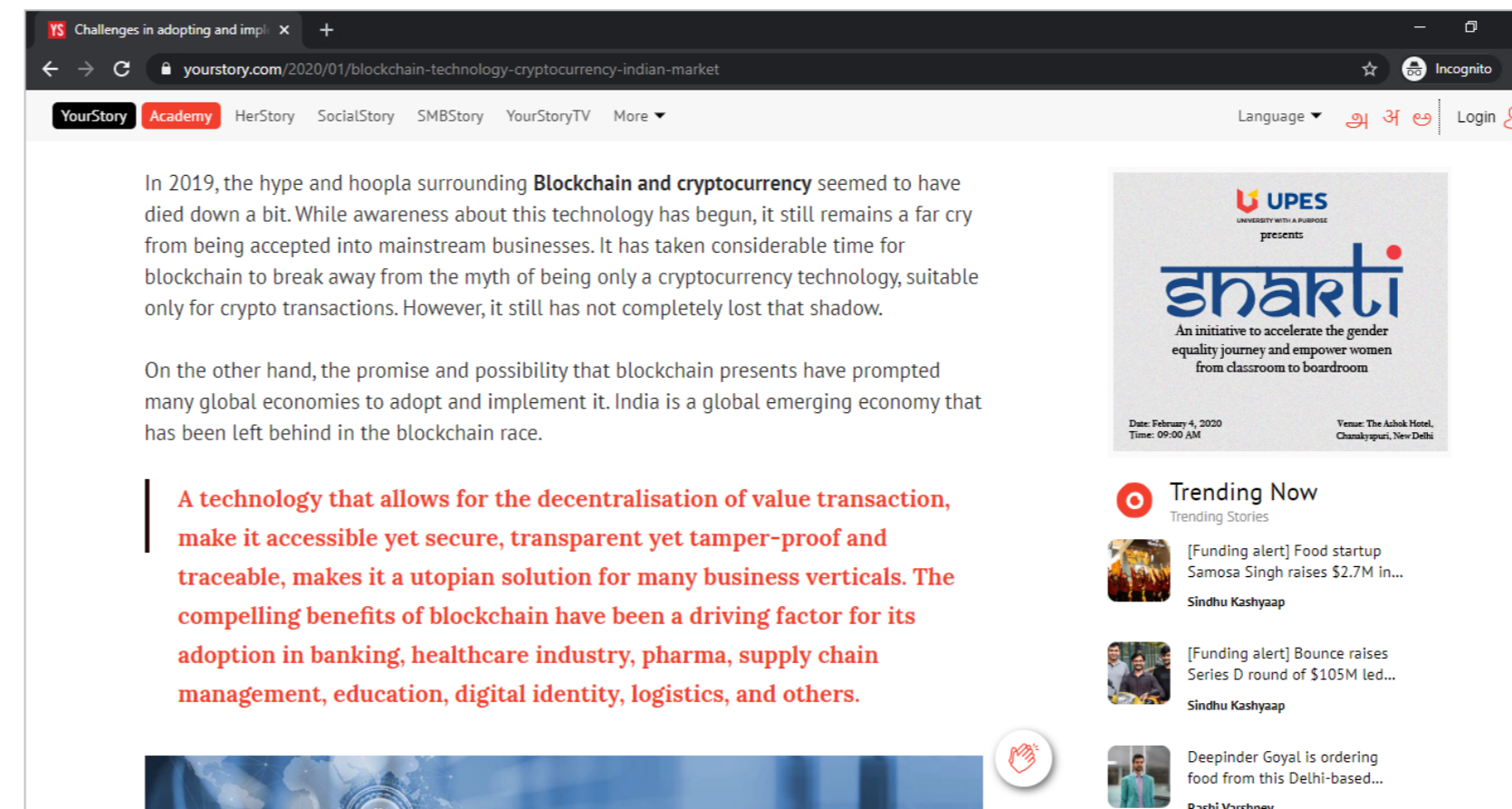


I am comfortable with the layout, can read it pretty well, fonts are fine. I like everything to be minimalistic - so I like this black and white page.

- Casual Reader
User Eleven

WORKED

- Most of the readers felt neutral about the current font size.
- They felt that the fonts are standard reading fonts and were comfortable to read.



An example for fonts of the blogging site YourStory.com

STRUGGLED

- Few of the readers found the fonts boring and wanted to see better fonts like the fonts they are used to seeing on other websites. (for example, a few blogging sites like 'YourStory'.)

“

The look is not that eye-catching. The colors are too dull. They should put some lively colors that would make people want to read. The topics written in the content like the Ancestors section can be more catchy.

- **CASUAL READER**
User Five

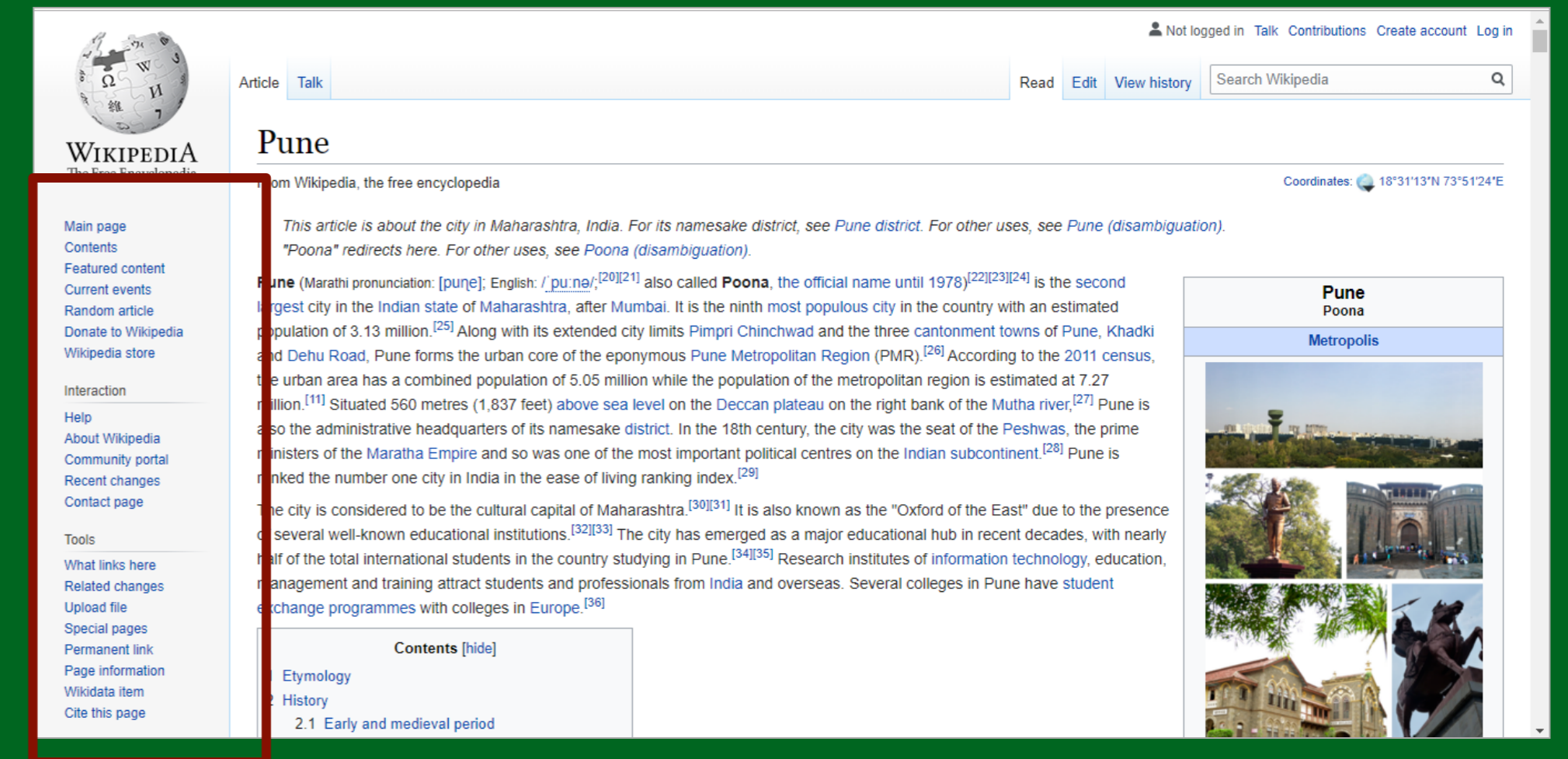


STRUGGLED

7. MAIN MENU

Not Relevant

Almost all of the readers were unable to understand the purpose of the main menu section and did not find it to be relevant.



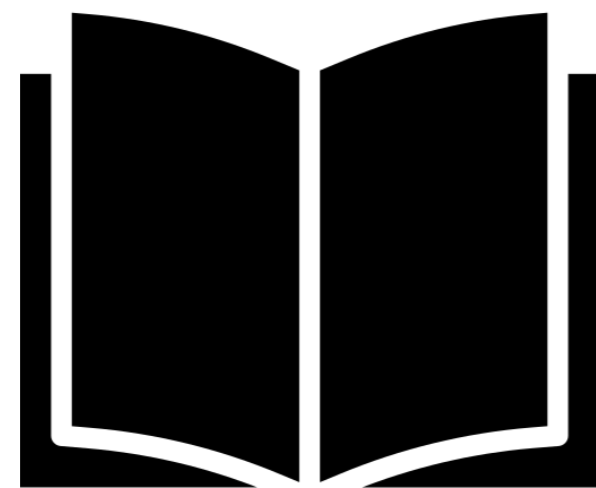
3. WHAT DO READERS **COMPARE** WIKIPEDIA WITH?

—

They compared Wikipedia with a library, book, online old books or to an encyclopedia. Almost all of the readers felt that Wikipedia contains in depth information about everything and they would not get this kind of information on any other website.

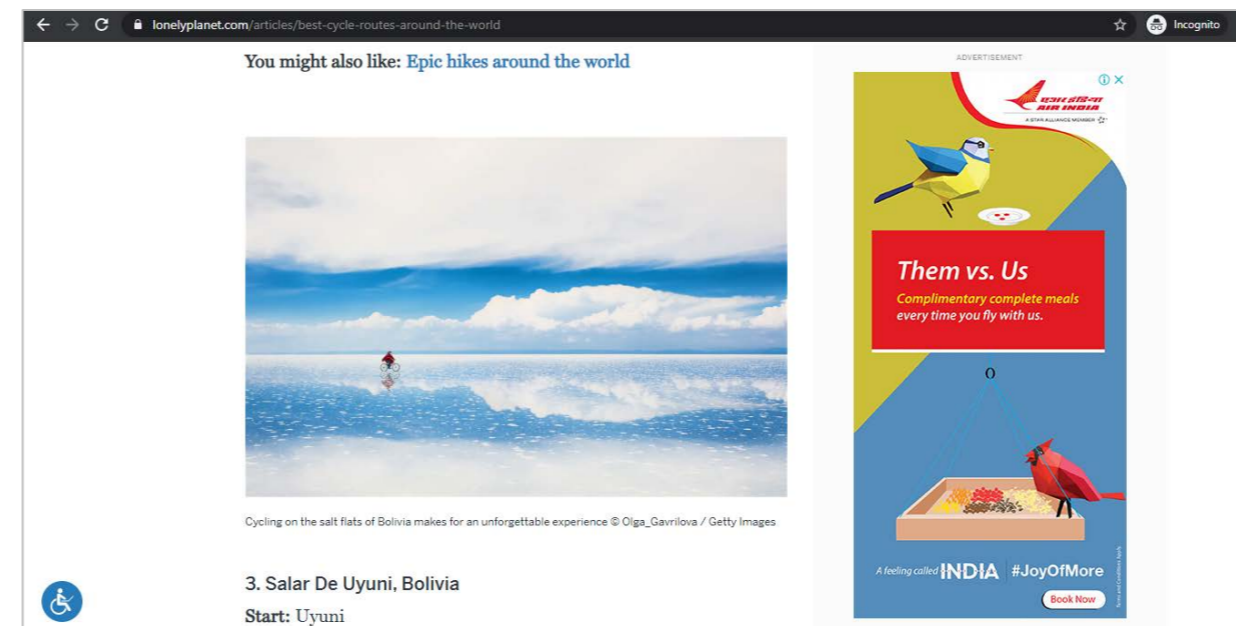
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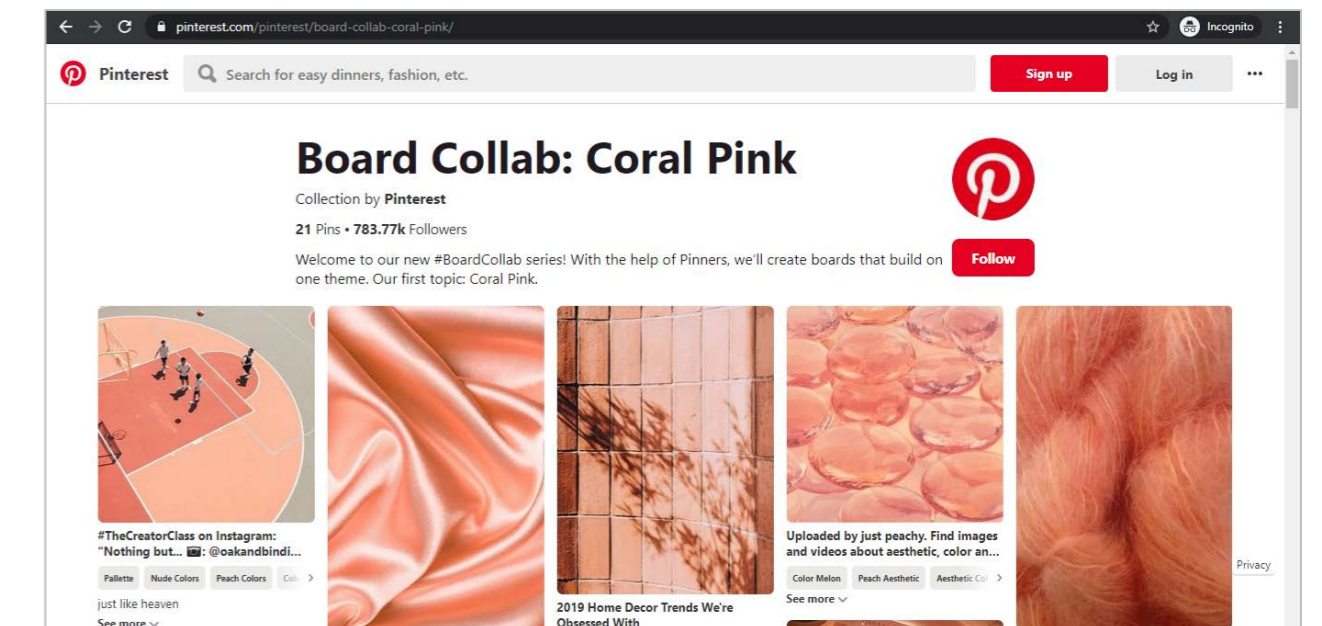
Books & Encyclopedia

The readers compared Wikipedia with a library, book, online old books or to an encyclopedia.



Text Heavy Information Websites

Some of the readers compared Wikipedia to text heavy information based sites like travel sites such as LonelyPlanet.com. However they found the information most segregated on the compared sites.



Visual Heavy Information Websites

Few of the readers compared Wikipedia to visual information based sites such as Pinterest.com. However they found more visual elements in the compared sites.

FINDINGS

1. READERS – NEW & CASUAL

2. WELCOMENESS

3. CREDIBILITY & TRUST

4. READABILITY

SECTION 3: CREDIBILITY & TRUST

1. DO THE READERS TRUST WIKIPEDIA? WHY OR WHY NOT?
2. WHO DO READERS BELIEVE CREATES CONTENT ON WIKIPEDIA?

1. DO THE READERS **TRUST** WIKIPEDIA?

—
The trust in Wikipedia content varies. – some people vouch for the content, others do not trust it completely.

WHY DO THEY TRUST

- 1 Reliable Source Of Information
- 2 Verified By Wikipedia Team
- 3 Belief In Experts

WHY DO THEY LACK TRUST

- 1 Editable By Anyone
- 2 Colleges Do Not Approve The Content
- 3 Authors Are Unknown

“

I can trust it 80% I think. Aspects like personal life I will least trust from Wikipedia. But the things that are like TV award and all is fine. In terms of an article on place, I might trust.

- Casual Reader
User Nine

PERCEPTION: WHY DO READERS TRUST WIKIPEDIA?

1. Reliable Source Of Information

Most of the readers felt that that content could be trusted as, in their experience, the information corroborated to what they had read/heard elsewhere, or they trusted due to familiarity.

Consistency In Information

The readers found the content on Wikipedia consistent with other sources of information such as books, online sites etc.

Prior Knowledge

The readers had prior information about the topic and found the content to be correct on Wikipedia.

Using Wikipedia Since Long Time

Some readers felt that they have been referring to Wikipedia for information, creating presentations etc. since they were young and thus consider it as reliable.

PERCEPTION: WHY DO READERS TRUST WIKIPEDIA?

2. Verified by Wikipedia team

A few readers believed that the Wikipedia team verifies the content written by the people and trust that they keep the content reliable.

“

It has a 99.99% chance that it is accurate. the wiki members might be verifying and also anyone else who feels like. they need to be verified since they are showing it to the whole world.

*- Casual Reader
User Twenty Three*

PERCEPTION: WHY DO READERS TRUST WIKIPEDIA?

3. Belief in Experts

A few readers believed that the content on Wikipedia is created by research scholars who have in depth knowledge on the topic.

“

Research Scholars and subject experts might have compiled it. it could be wiki team. This is not the work of a normal person, it is very difficult. It is the work of experts only.

*- New Reader
User Fifteen*

PERCEPTION: WHY DO READERS LACK TRUST IN WIKIPEDIA?

Despite using Wikipedia for various reasons, users still do not trust Wikipedia completely. The lack of trust in Wikipedia exists because of various factors listed below:

Editable By Anyone

The readers believed that the edit option on the page gives anyone the ability to edit the content without being verified by anyone.

Colleges Do Not Approve The Content

The users mentioned that the content given on Wikipedia is not accepted by the authorities in college for assignments, which in turn reduces their trust.

Authors Are Unknown

The readers were not aware of who created the content and who the authors are. There were many assumptions made by the readers including that some agency has been hired to write the content.

2. WHO DO READERS BELIEVE CREATES CONTENT ON WIKIPEDIA?

Most of the readers are not aware of who is creating the content on Wikipedia or how it is created. These readers believe that content is created by the following possibilities:

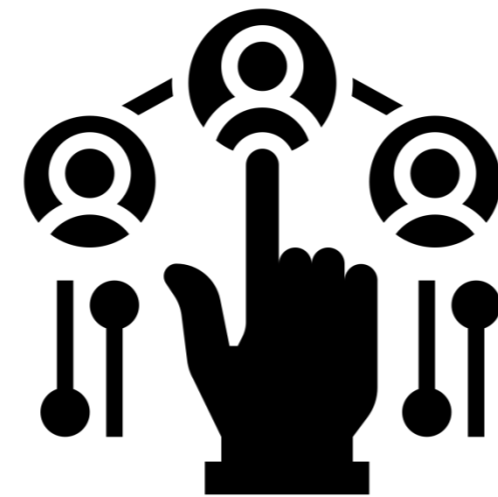
- | | | | |
|---|--|---|-------------------------------|
| 1 | Wikipedia Employees | 4 | Research Scholars |
| 2 | Wikipedia Agencies | 5 | Account holders of Wikipedia |
| 3 | Freelance Content Writers at Wikipedia | 6 | Data from various other sites |

WHO DO READERS BELIEVE CREATES CONTENT ON WIKIPEDIA?



Wikipedia Employees

Most readers believed that the content on Wikipedia was created by the employees of Wikipedia.



Wikipedia Agencies

Some readers believed that Wikipedia had hired agencies across the world to write the content and they wrote content on different topics.



Freelance Writers

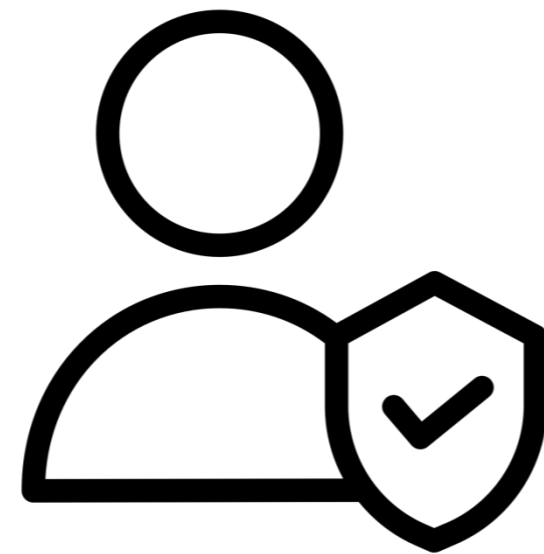
Few readers thought that Wikipedia hires freelance content writers to create the information.

WHO DO READERS BELIEVE CREATES CONTENT ON WIKIPEDIA?



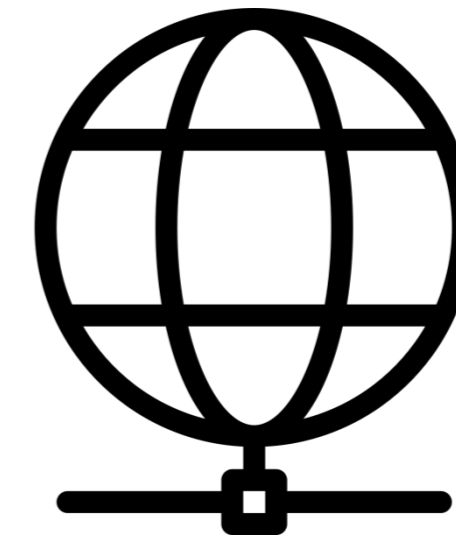
Research Scholars

Some readers felt that content was created by professors, PHD Students, professionals with 10 years of experience or who were researching different topics.



Account holders of Wikipedia

Few readers felt that the content was created by people who had created their account on Wikipedia.



Data from various other sites

Few also believed that Wikipedia collects information from different sites such as Google.

FINDINGS

1. READERS – NEW & CASUAL

2. WELCOMENESS

3. CREDIBILITY & TRUST

4. READABILITY

SECTION 4: READABILITY

1. HOW WAS THE READABILITY OF WIKIPEDIA?

1. HOW WAS THE **READABILITY** OF WIKIPEDIA?

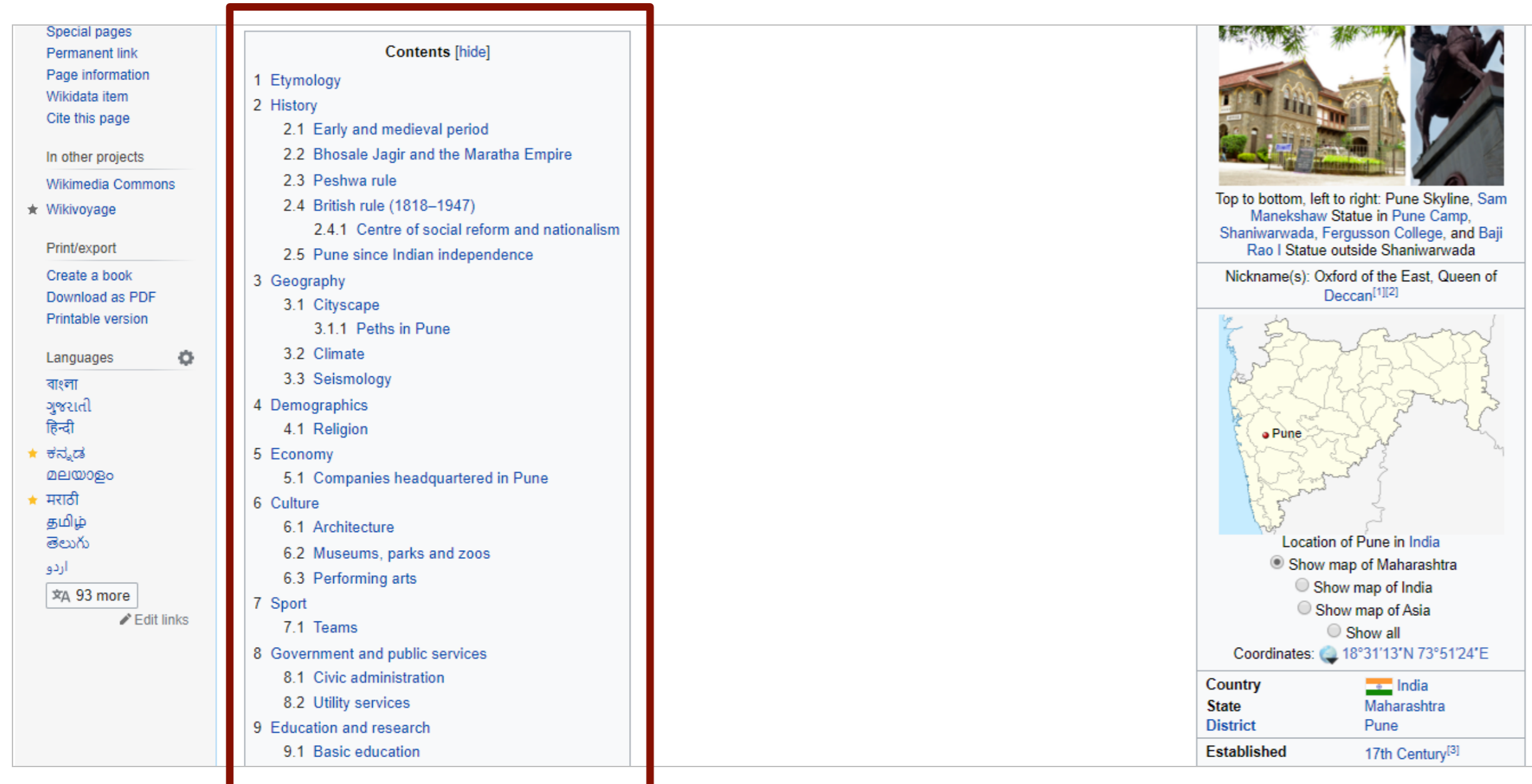
—

The casual and new readers both had mixed reactions about the readability of the site. These reactions depended on whether or not they were able to understand the components:

- | | | | |
|---|-------------------|---|--------------------|
| 1 | Table of Contents | 4 | User Tools |
| 2 | Hyperlinks | 5 | Language Switching |
| 3 | Article Tools | 6 | Search |

SECTION 4: READABILITY

HOW WAS THE READABILITY OF WIKIPEDIA?



The screenshot shows the Wikipedia page for Pune, India. A red box highlights the 'Contents' table of contents, which lists the following sections:

- 1 Etymology
- 2 History
 - 2.1 Early and medieval period
 - 2.2 Bhosale Jagir and the Maratha Empire
 - 2.3 Peshwa rule
 - 2.4 British rule (1818–1947)
 - 2.4.1 Centre of social reform and nationalism
 - 2.5 Pune since Indian independence
- 3 Geography
 - 3.1 Cityscape
 - 3.1.1 Peths in Pune
 - 3.2 Climate
 - 3.3 Seismology
- 4 Demographics
 - 4.1 Religion
- 5 Economy
 - 5.1 Companies headquartered in Pune
- 6 Culture
 - 6.1 Architecture
 - 6.2 Museums, parks and zoos
 - 6.3 Performing arts
- 7 Sport
 - 7.1 Teams
- 8 Government and public services
 - 8.1 Civic administration
 - 8.2 Utility services
- 9 Education and research
 - 9.1 Basic education

Below the table of contents, there is a gallery of images showing the Pune skyline, the Sam Manekshaw Statue, the Shaniwarwada, Fergusson College, and the Bajirao I Statue. A map of India highlights the location of Pune in Maharashtra. The coordinates are 18°31'13"N 73°51'24"E. A table at the bottom provides the following information:

Country	 India
State	Maharashtra
District	Pune
Established	17th Century ^[3]

1 TABLE OF CONTENTS

—

All participants understood the concept of Table of Contents and liked the feature.

TABLE OF CONTENTS: WORKED

CASUAL READERS

Liked The Concept of Links

- The readers liked that they could go to a particular section in the article by clicking on the links.

Liked The Location Of Table Of Contents

- Most of the readers liked that the location of the Table of Contents was after the first few paragraphs because that placement gives them some context about the topic.
- They felt neutral about the size of the Table of Contents.

TABLE OF CONTENTS: WORKED

NEW READERS

Liked The Concept of Links

- The readers liked that they could go to a particular section in the article by clicking on the links

Includes All Topics

- Most of the readers liked that the Table of Contents includes all the topics covered in the article.

TABLE OF CONTENTS - STRUGGLED

NEW READERS

—

Links

- Few of the new readers were unable to understand that there were links within the Table of Contents or the purpose of those links.

SECTION 4: READABILITY

HOW WAS THE READABILITY OF WIKIPEDIA?

The screenshot shows the Wikipedia article for Pune. The first paragraph is highlighted with a red box. The text in the box is: **Pune** (Marathi pronunciation: [ˈpuɳe]; English: /ˈpuːneɪ/;^{[20][21]} also called **Poona**, the official name until 1978)^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadk and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

2 HYPERLINKS

—

Hyperlinks includes Links, Hover Box and Superscripts.

Some of the readers understood the concept of Links while some were not able to understand that these are hyperlinks at first.

HYPERLINKS - WORKED

CASUAL READERS

—

Understood The Concept

Almost all casual readers understood the concept of Links and liked the feature.

In-Depth Information On Other Topics

They liked that from the Links they could get information about any topic by clicking on the link rather than searching for it again.

Information From Hover Box

Most of the readers liked that they could get brief information related to the topic from the Hover Box and could click on the link to get in-depth details.

HYPERLINKS - WORKED

NEW READERS

—

Detailed Information On Different Topics

Some readers who discovered the concept liked the feature. They liked that they can get detailed information about different topics and found it useful.

Article Talk

Read Edit View history Search Wikipedia

WIKIPEDIA
The Free Encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools
What links here
Related changes
Upload file
Special pages
Permanent link
Page information
Wikidata item
Cite this page

Coordinates: 18°31′13″N 73°51′24″E﻿ / ﻿18.52028°N 73.85639°E﻿ / 18.52028; 73.85639

*This article is about the city in Maharashtra, India. For its namesake district, see Pune district. For other uses, see Pune (disambiguation).
"Poona" redirects here. For other uses, see Poona (disambiguation).*

Pune (Marathi pronunciation: [pʊɳe]; English: /ˈpuː.ɳə/^{[20][21]} also called **Poona**, the official name until 1978)^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

The city is considered to be the cultural capital of Maharashtra.^{[30][31]} It is also known as the "Oxford of the East" due to the presence of several well-known educational institutions.^{[32][33]} The city has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune.^{[34][35]} Research institutes of information technology, education, management and training attract students and professionals from India and overseas. Several colleges in Pune have student exchange programmes with colleges in Europe.^[36]

Contents [hide]

- Etymology
- History
 - Early and medieval period

Pune
Poona
Metropolis

“

I just hovered my mouse and realized the hover box. I liked it. This is a new feature introduced by Wikipedia some time back, I had discovered this sometime last year .

- Casual Reader

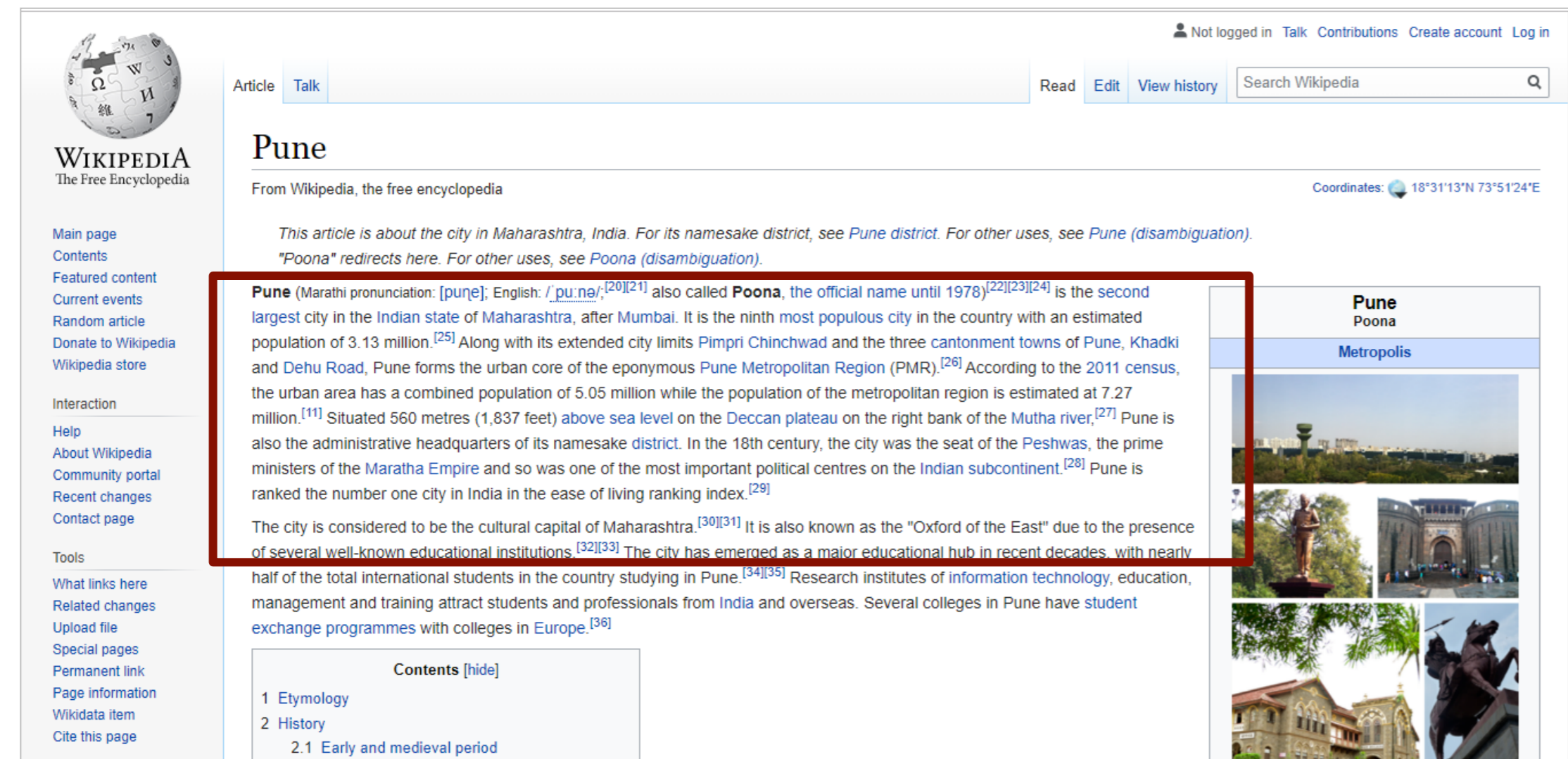
User Twenty Three

HYPERLINKS - STRUGGLED

CASUAL READERS

Number Of Links

Some of the readers found the Links on the page distracting and wanted to see less number of links or hover boxes.



HYPERLINKS - STRUGGLED

NEW READERS

Unable To Understand The Concept of Hyperlinks

Most of the readers did not understand the concept of Links at first glance. They felt that words were highlighted in blue as they were important.

“

I think there are too many links mentioned over here. This much is not required actually. I think there is no need to link 'match referee' or 'umpire'. While reading itself the person will get to know about this word. And it is quite disturbing also.

*- Casual Reader
User Nine*

“

The blue words have their own definitions. They are highlighted so you can easily understand (remember) them.

*- New Reader
User Fourteen*

SECTION 4: READABILITY

HOW WAS THE READABILITY OF WIKIPEDIA?

The screenshot shows the Wikipedia article for Pune. At the top right, there are links for 'Not logged in', 'Talk', 'Contributions', 'Create account', and 'Log in'. Below these is a search bar with the text 'Search Wikipedia' and a magnifying glass icon. A red box highlights three buttons: 'Read', 'Edit', and 'View history'. The article title 'Pune' is prominently displayed. Below the title, there is a coordinate string: 'Coordinates: 18°31′13″N 73°51′24″E'. The main text of the article begins with: 'Pune (Marathi pronunciation: [ˈpuɳe]; English: /ˈpuːneː;^{[20][21]} also called **Poona**, the official name until 1978)^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

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On the right side of the article, there is a section titled 'Pune Poona Metropolis' with several images showing different views of the city, including a statue and a building.

At the bottom left, there is a 'Tools' section with a red box around it, containing links for 'What links here', 'Related changes', 'Upload file', 'Special pages', 'Permanent link', 'Page information', 'Wikidata item', and 'Cite this page'.

3 ARTICLE TOOLS

The readers were **confused about whether these tools are related to** the topic they searched for, or related to the Wikipedia site.

ARTICLE TOOLS > TOOLS - WORKED

CASUAL & NEW READERS

Partially Understood Upload File

- Some of the readers partially understood the concept of Upload Files. They felt that they could upload **both** text and image, and not only image.



ARTICLE TOOLS > **TOOLS** - STRUGGLED

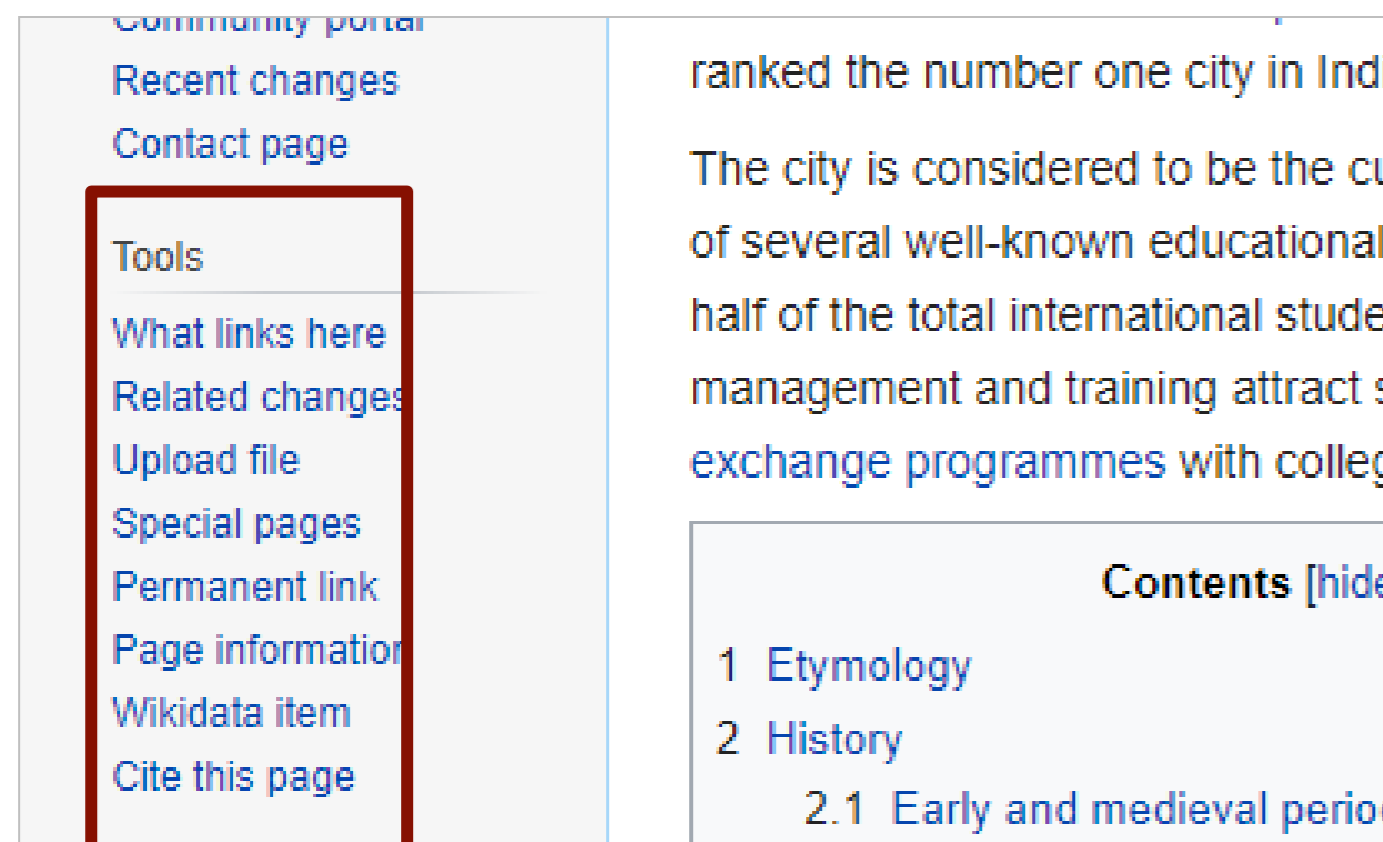
CASUAL READERS

Unable To Understand The Terminology

- Almost all readers were unable to understand the terminology of Tools.
- Some of them felt that Tools referred to settings that would make the page more personalized or it contained Tools that can be used for locating things within the article.

Unable To Understand The Concept

Almost all readers explored the Tools section but were unable to understand the concept.

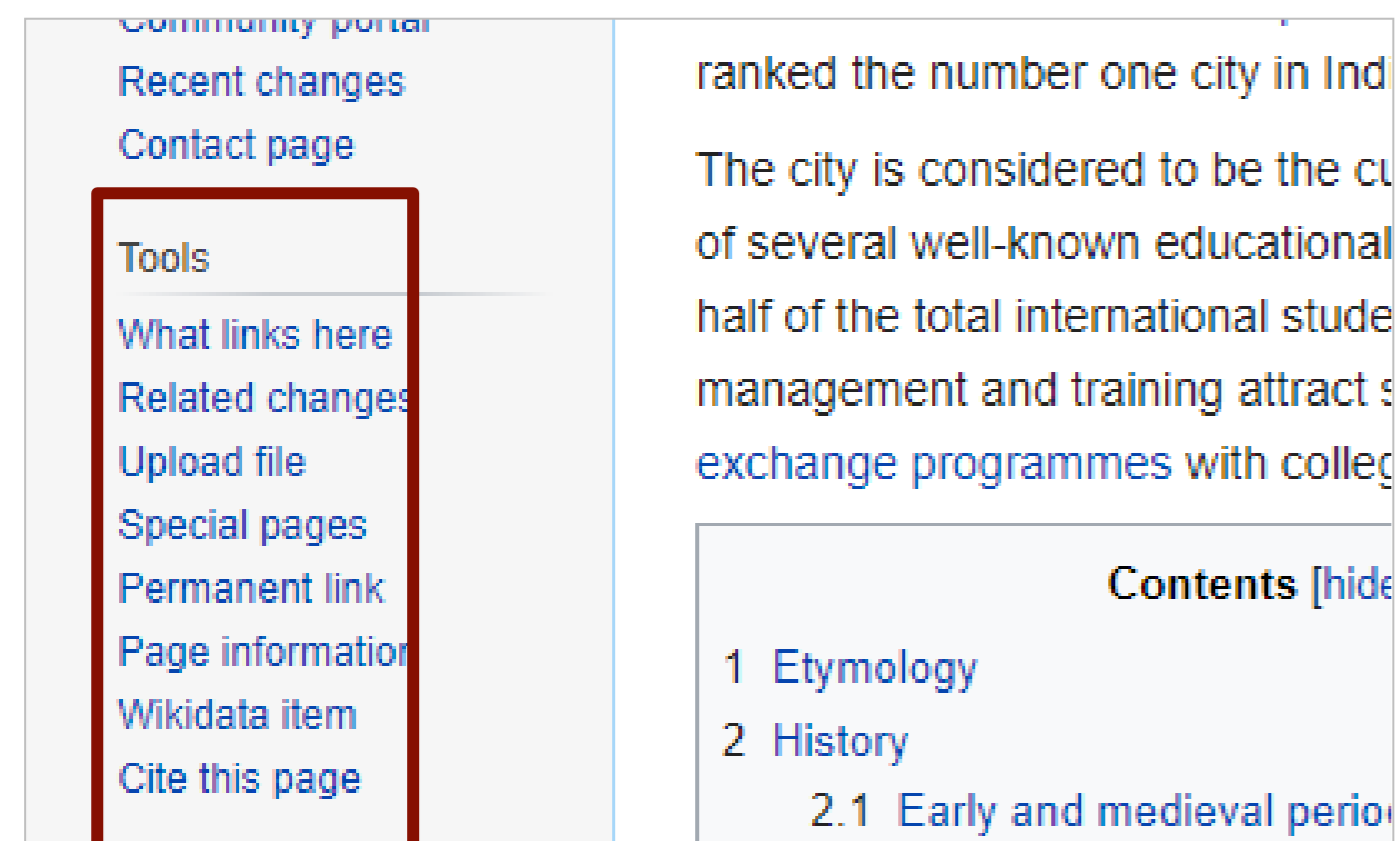


ARTICLE TOOLS > TOOLS - STRUGGLED

NEW READERS

Unable To Understand The Terminology

- Almost all readers were unable to understand the terminology of Tools.
- A few of them felt that Tools referred to settings that would make the page more personalized.
- They felt that it would include settings to copy the article, make the page more colorful so that they can use it for their work or projects.



Unable To Understand The Concept

Almost all readers explored the Tools section but were unable to understand the concept.

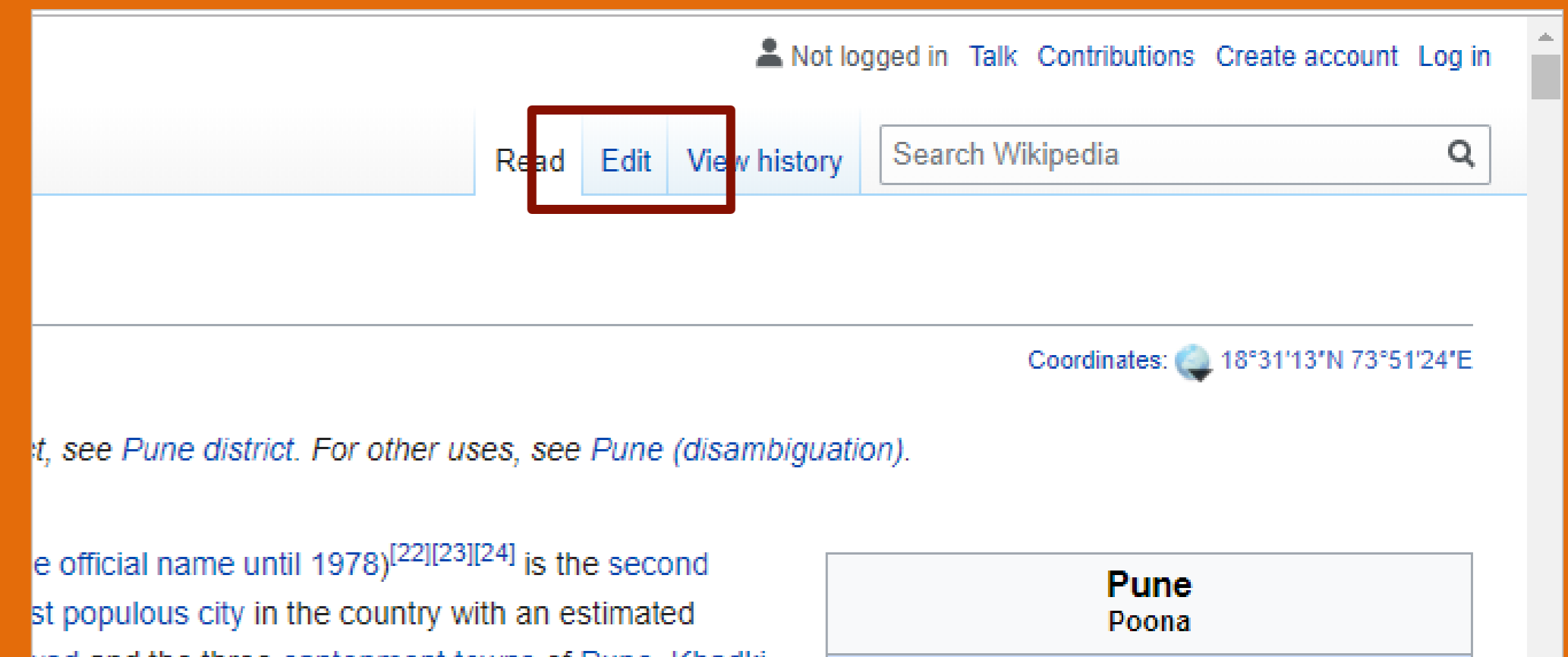
- **What Links Here** - Most of the readers did not understand the concept and thought it contained the links from the article they are reading.
- **Related Changes** - Few readers felt that it includes the updates about the Wikipedia website.

ARTICLE TOOLS > [EDIT](#) - WORKED

CASUAL READERS

Aware of Editing Articles

- Most of the readers mentioned that they were aware that articles could be edited in Wikipedia since they had heard it from somewhere such as from friends.



ARTICLE TOOLS > EDIT - STRUGGLED

CASUAL READERS

Editing Without An Account

- Most of the readers who explored this feature were confused that they were able to edit without creating an account.

Navigated Through Upload File

- Some readers were not aware that articles could be edited by anyone but since they had seen the option to upload a file they felt that maybe they can also edit on Wikipedia.

ARTICLE TOOLS > EDIT - STRUGGLED

NEW READERS

Did Not Understand The Concept

- Most of the new readers did not understand the concept of Edit.
- Few of them thought that Edit will let them create a version of the article for their personal use. (for example: edit the font size, add or reduce the content, copy information and save, etc.)

Navigated Through Upload File

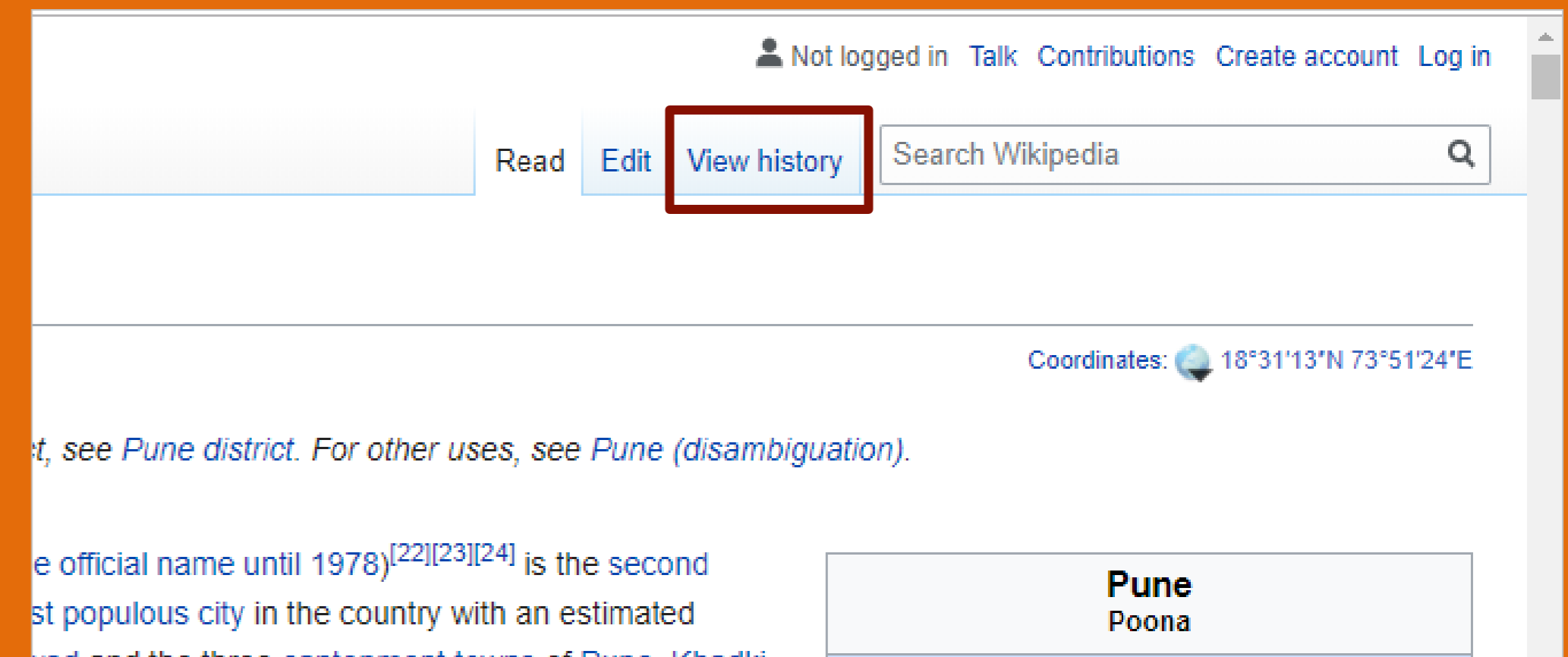
- Few of them thought they could edit the article as they had seen the Upload File feature and thought it meant they could add a photo or video and hence “edit” the article.

ARTICLE TOOLS > [VIEW HISTORY](#) - WORKED

CASUAL READERS

Understood The Concept

- Very few readers understood that it would include the revisions done by people who have edited the article.



ARTICLE TOOLS > [VIEW HISTORY](#) - STRUGGLED

CASUAL READERS

Unable To Understand The Concept

- Most of the readers were unable to understand the concept. They felt that it would include the history of pages that they have visited on Wikipedia after they create an account.
- Some of them felt that it would show them how many times the article has been edited.

ARTICLE TOOLS > [VIEW HISTORY](#) - STRUGGLED

NEW READERS

Unable To Understand The Concept

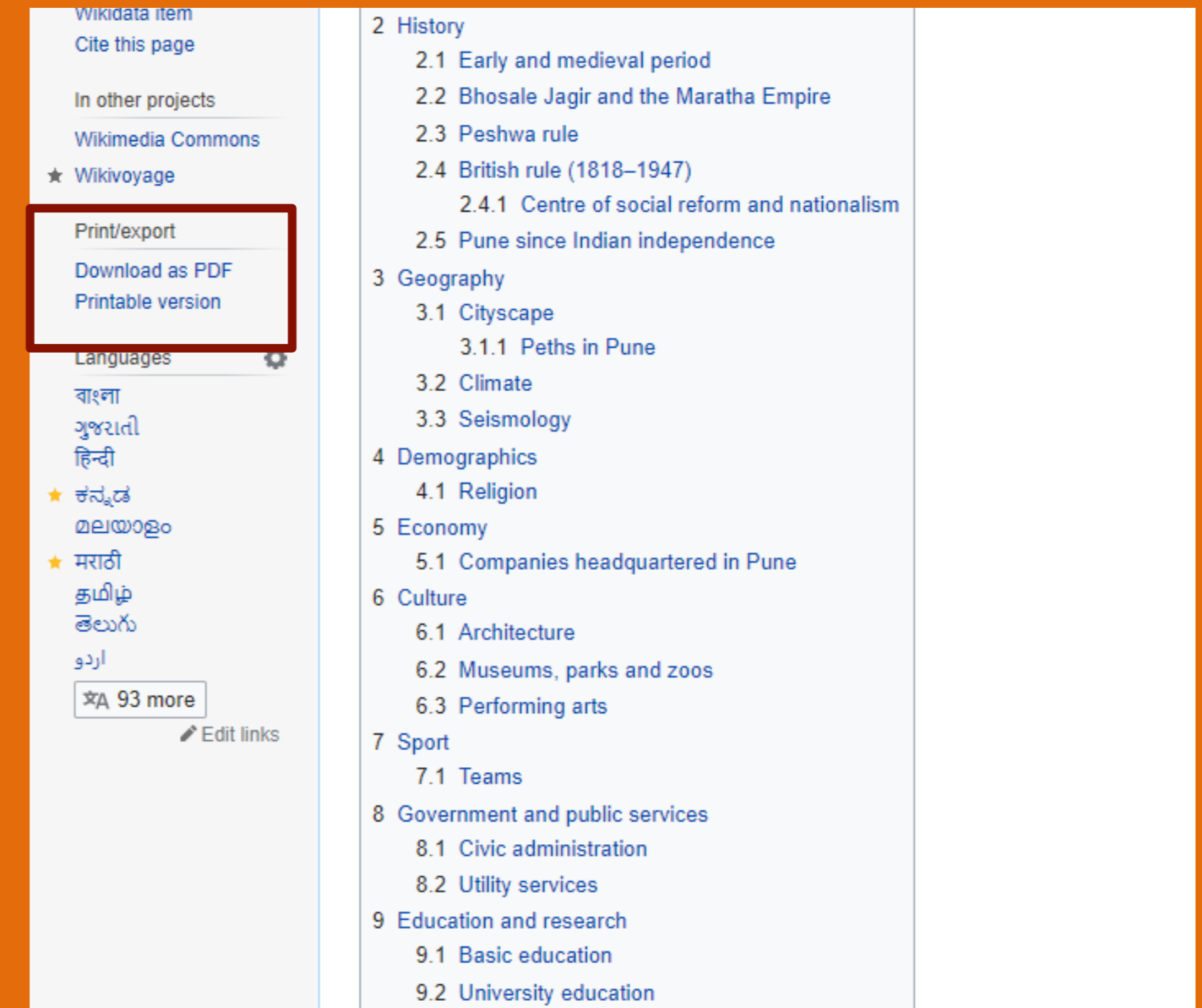
- Most of the readers were unable to understand the concept. They felt that it would include the history of pages that they have visited on Wikipedia. They compared it to Google history.
- A very few readers felt that included the history about the topic that they were reading.

ARTICLE TOOLS > [PRINT/EXPORT](#) - WORKED

CASUAL & NEW READERS

Understood The Concept

- Some of the readers who explored Print/export understood the concept and liked that they could either print the article or download it as a PDF.



ARTICLE TOOLS > [PRINT/EXPORT](#) - STRUGGLED

CASUAL READERS

Unaware About The Feature

- Some of the readers who explored the Print/export feature were not aware that they could print or download the article directly from here. A few readers used to copy the article first and then paste it in a Word document.

ARTICLE TOOLS > [PRINT/EXPORT](#) - STRUGGLED

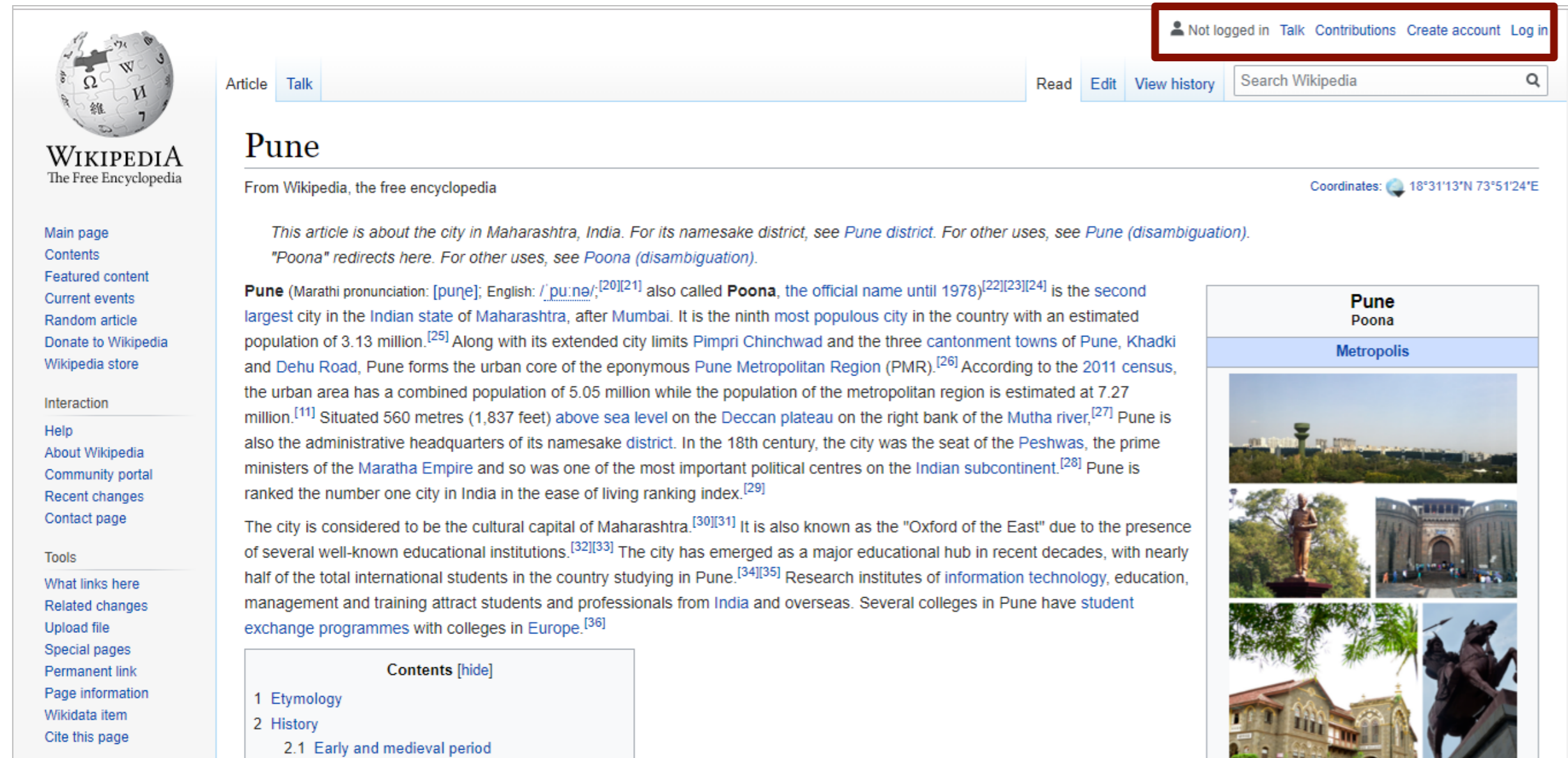
NEW READERS

Unable To Understand The Concept

- A few readers felt that using this feature they could create a customized book that would include only information that they wanted to read.

SECTION 4: READABILITY

HOW WAS THE READABILITY OF WIKIPEDIA?



The screenshot shows the Wikipedia article for Pune. At the top right, a navigation bar contains the text "Not logged in" followed by links for "Talk", "Contributions", "Create account", and "Log in". The "Create account" link is highlighted with a red rectangular box. Below this, there are tabs for "Article" and "Talk", and a search bar with the text "Search Wikipedia". The main content area features the title "Pune" and a sub-header "From Wikipedia, the free encyclopedia". The article text begins with "Pune (Marathi pronunciation: [puɳe]; English: /ˈpuːneː; also called Poona, the official name until 1978) is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million. Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR). According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million. Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river, Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent. Pune is ranked the number one city in India in the ease of living ranking index." To the right of the text is a gallery of images related to Pune, including a view of the city, a statue, and a building. At the bottom left, there is a "Contents" table of contents with links to "1 Etymology", "2 History", and "2.1 Early and medieval period".

4 USER TOOLS

—

All participants understood **Create an account** and some readers understood that in order to edit the article, they will have to create their accounts first.

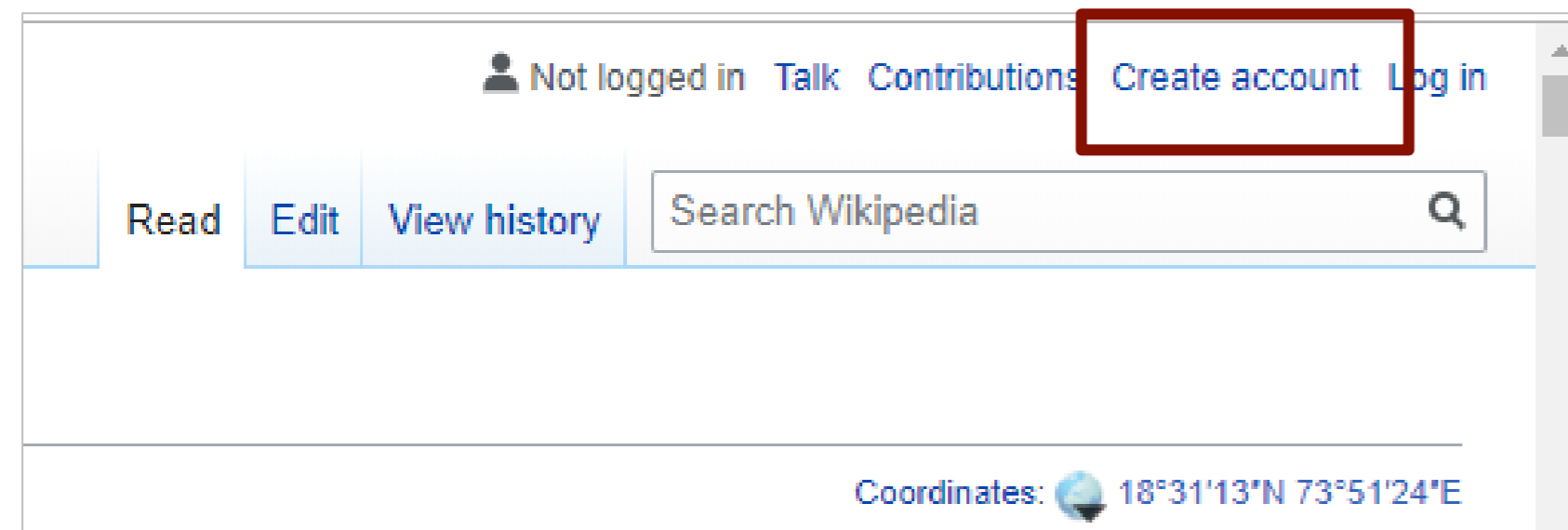
Most readers did not understand the concept of **Contributions**. They felt they could give their feedback or could see a list of people who contributed to the article.

USER TOOLS > [CREATE AN ACCOUNT](#) - WORKED

CASUAL READERS

Understood The Concept

- Almost all readers understood the concept of **Create an account**.
- A few them understood that they would have to create an account so that they could edit the article.



USER TOOLS > [CREATE AN ACCOUNT](#) - WORKED

NEW READERS

Understood The Concept

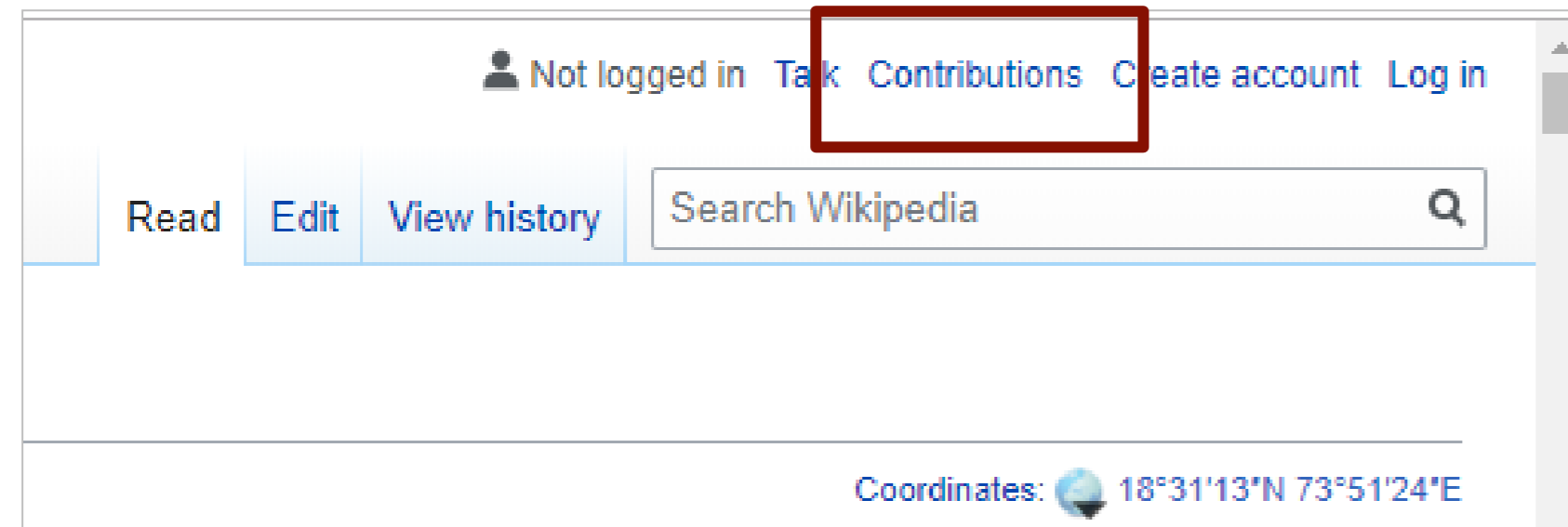
- Most of the readers understood the concept of **Create an account**.
- They felt that after creating an account they would get latest updates about Wikipedia on their email ID and could also see their history on the page.

USER TOOLS > CONTRIBUTIONS - STRUGGLED

CASUAL READERS

Unable To Understand The Concept

- Some of them felt that they could give their feedback related to the article after they created an account.
- Some of them felt that they could see the list of people who have contributed towards the article.



USER TOOLS > CONTRIBUTIONS - STRUGGLED

NEW READERS

Unable To Understand The Concept

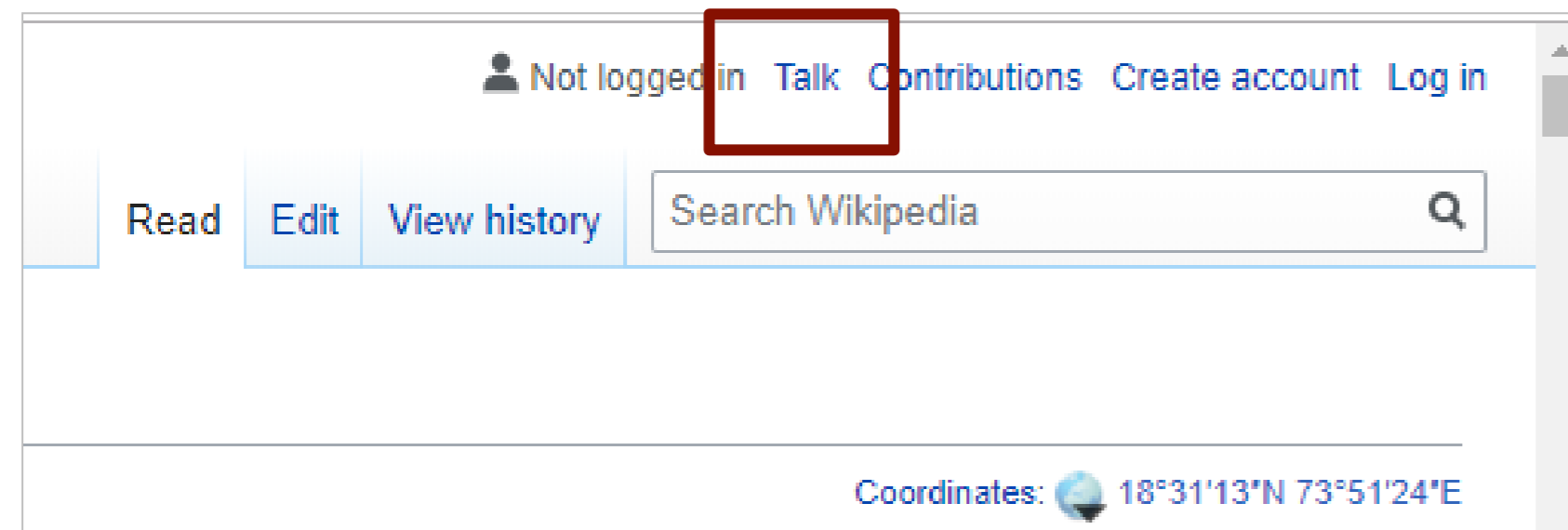
- Most of the readers could not understand the concept. Some of them felt that it referred to the contributions of Wikipedia team in providing information.
- Some of them that it would contain a list that would include the names of people who contributed towards creating the article.

USER TOOLS > **TALK** - STRUGGLED

CASUAL READERS

Unable To Understand The Concept

Almost all readers could not understand the concept and felt that it is either a chat bot or a way for them to contact the Wikipedia team incase of any issue. They related "Talk" to the support team at Wikipedia.

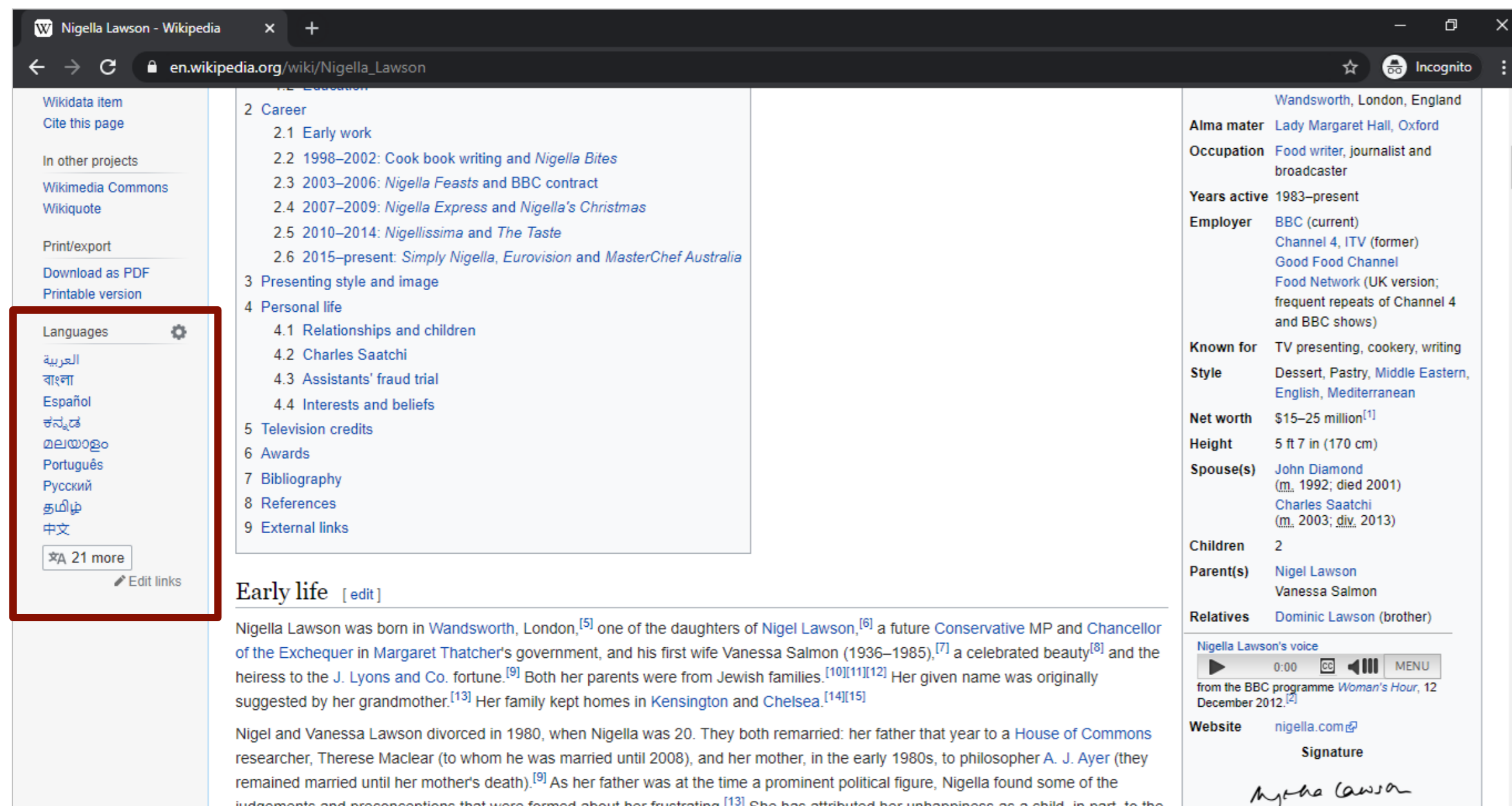


USER TOOLS > **TALK** - STRUGGLED

NEW READERS

Unable To Understand The Concept

Almost all readers could not understand the concept and felt that it is either a chat bot or a way for them to contact the Wikipedia team incase of any issue. They related "Talk" to the support team at Wikipedia.



5 LANGUAGE SWITCHING

Most of the readers could understand the terminology and concept of Languages.

They were unaware that they had an option of changing the Language within the article.

LANGUAGE SWITCHING - WORKED

CASUAL & NEW READERS

—

Understood The Terminology

- Once they discovered the feature, almost all of the readers understood that Languages meant that they could read the article in various languages mentioned there.

LANGUAGE SWITCHING - STRUGGLED

CASUAL READERS

Unaware About The Location

Most of the readers who explored Languages were unaware about this feature and had not seen it before.

LANGUAGE SWITCHING - STRUGGLED

NEW READERS

Unaware About The Location

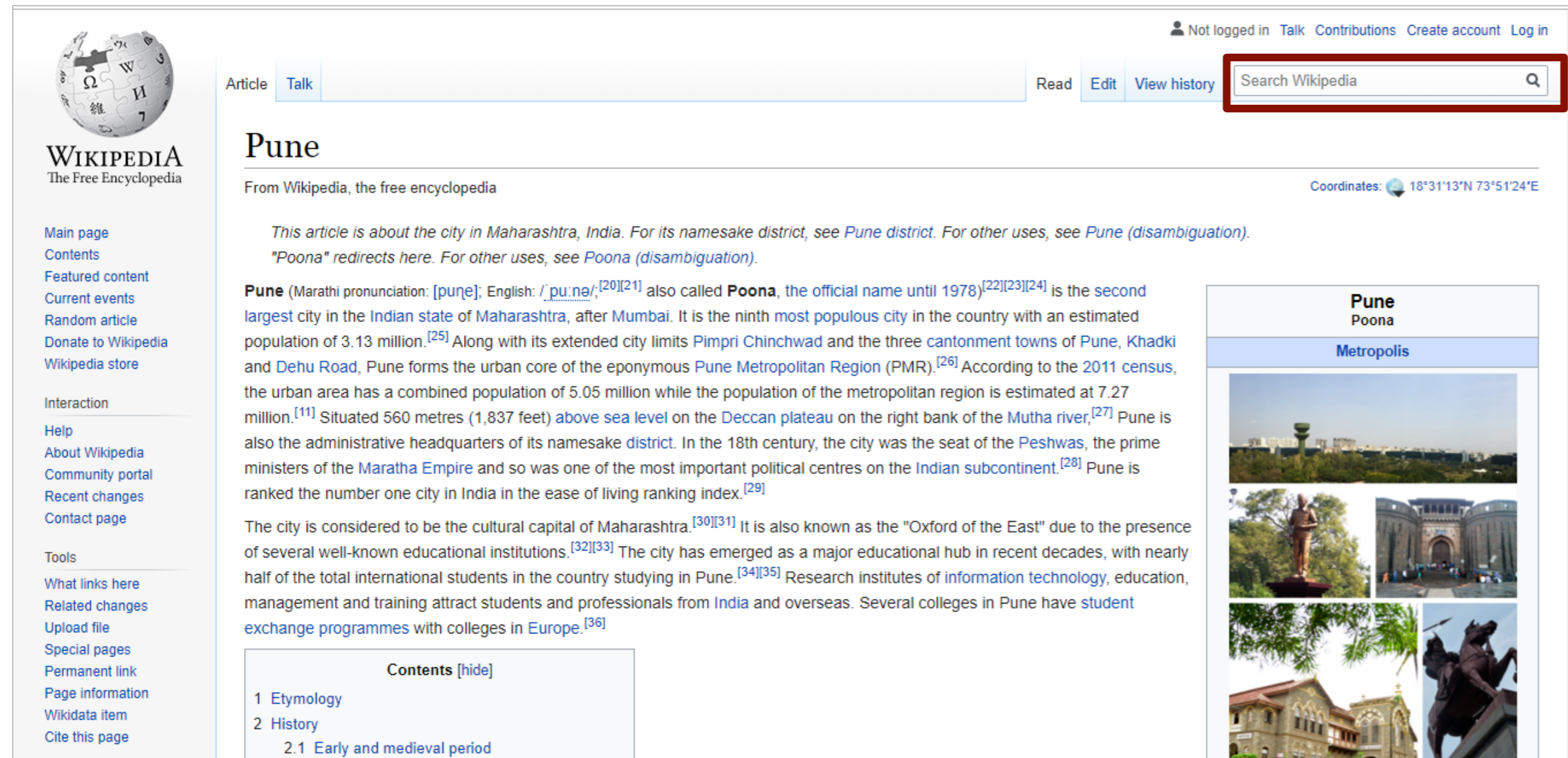
- Most of the readers who explored Languages were unaware about this feature and had not seen it before.

Unable To Understand The Concept

- Some readers felt that the entire page would be translated in the language that they had selected.
- They were confused as the entire page was not translated and had different photos than the ones in the original article page.

SECTION 4: READABILITY

HOW WAS THE READABILITY OF WIKIPEDIA?



The screenshot shows the Wikipedia article for Pune. The search bar at the top right is highlighted with a red border. The article title is "Pune" and it includes a navigation menu with "Article" and "Talk" tabs. The main content area contains a paragraph about Pune, a table of contents, and a gallery of images. The search bar contains the text "Search Wikipedia" and a magnifying glass icon.

Not logged in | Talk | Contributions | Create account | Log in

Article | Talk | Read | Edit | View history | Search Wikipedia

Pune

From Wikipedia, the free encyclopedia

This article is about the city in Maharashtra, India. For its namesake district, see Pune district. For other uses, see Pune (disambiguation).


"Poona" redirects here. For other uses, see Poona (disambiguation).

Pune (Marathi pronunciation: [ˈpuɳe]; English: /ˈpuːneɪ/^{[20][21]} also called **Poona**, the official name until 1978)^{[22][23][24]} is the second largest city in the Indian state of Maharashtra, after Mumbai. It is the ninth most populous city in the country with an estimated population of 3.13 million.^[25] Along with its extended city limits Pimpri Chinchwad and the three cantonment towns of Pune, Khadki and Dehu Road, Pune forms the urban core of the eponymous Pune Metropolitan Region (PMR).^[26] According to the 2011 census, the urban area has a combined population of 5.05 million while the population of the metropolitan region is estimated at 7.27 million.^[11] Situated 560 metres (1,837 feet) above sea level on the Deccan plateau on the right bank of the Mutha river,^[27] Pune is also the administrative headquarters of its namesake district. In the 18th century, the city was the seat of the Peshwas, the prime ministers of the Maratha Empire and so was one of the most important political centres on the Indian subcontinent.^[28] Pune is ranked the number one city in India in the ease of living ranking index.^[29]

The city is considered to be the cultural capital of Maharashtra.^{[30][31]} It is also known as the "Oxford of the East" due to the presence of several well-known educational institutions.^{[32][33]} The city has emerged as a major educational hub in recent decades, with nearly half of the total international students in the country studying in Pune.^{[34][35]} Research institutes of information technology, education, management and training attract students and professionals from India and overseas. Several colleges in Pune have student exchange programmes with colleges in Europe.^[36]

Contents [hide]
1 Etymology
2 History
2.1 Early and medieval period

Pune
Poona
Metropolis



6 SEARCH

—

Most of the participants understood the concept and liked the feature.

SEARCH - WORKED

CASUAL READERS

Understood The Concept

Almost all of the readers understood and liked the feature.

They felt that they could search and read about more topics rather than typing it on Google. However, some of them said they would still like to search on Google since they get varied results.

SEARCH - WORKED

NEW READERS

Understood The Concept

Most of the readers understood and liked the feature. They felt that they could search and read about more topics rather than typing it on Google.

APPENDIX

—

About the Readers | Recordings | Acknowledgements

ABOUT THE READERS

	Age	Gender	Profession	Category
User One	20-30	Male	Student	Casual Reader
User Two	20-30	Male	Student	New Reader
User Three	20-30	Male	Student	Casual Reader
User Four	25-35	Male	Software Engineer	Casual Reader
User Five	20-30	Female	Baker	Casual Reader
User Six	25-30	Female	Doctor	Casual Reader
User Seven	20-30	Male	Student	Casual Reader
User Eight	20-30	Male	Engineering Student	Casual Reader
User Nine	20-30	Male	Software Engineer	Casual Reader
User Ten	20-40	Female	Software Engineer	Casual Reader
User Eleven	20-30	Female	Project Manager	Casual Reader
User Twelve	20-30	Male	Student	New Reader
User Thirteen	20-30	Male	Admin	New Reader
User Fourteen	30-40	Female	Homemaker	New Reader
User Fifteen	30-40	Female	Homemaker	New Reader
User Sixteen	30-40	Male	Business Owner	New Reader
User Seventeen	20-30	Male	Student	New Reader
User Eighteen	30-40	Male	Supervisor	New Reader
User Nineteen	20-30	Male	Student	New Reader
User Twenty	30-40	Female	Homemaker	New Reader
User Twenty One	25-40	Female	Homemaker	New Reader
User Twenty Two	20-30	Male	Service Engineer	New Reader
User Twenty Three	20-30	Male	Software Engineer	New Reader
User Twenty Four	20-30	Male	Software Engineer	New Reader

REFERENCES

Session Recordings are available [here](#).

These links will be active for download till February 24th, 2020.

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Margeigh Novotny, Senior Director of Design Strategy

Daisy Chen, Design Researcher

Olga Vasileva, Senior Product Manager

Alex Hollender, Lead Designer

ABOUT HUREO

Hureo is a user experience research firm based out of India. Hureo works with a wide range of organisations across the world to enable them to create and improve their products and services. Hureo uses various UX research methodologies to provide their clients with user insights that help identify user needs, challenges and opportunities. They have worked in various companies from startups to MNCs in both India and abroad giving them a range of knowledge and experience.

Our team comes from diverse backgrounds such as HCI, Design Thinking, Cognitive Sciences, and Advertising and Media.

The team that worked on this project consisted of:

Anjeli Singh, Founder and UX Researcher

Jahnvi Mirashi, UX Researcher

Arunima Ved, Associate UX Researcher

Swetlana Patil, Associate UX Researcher

To know more about Hureo:

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