

AI-Based Text Simplification for Cognitive Accessibility

Group 7

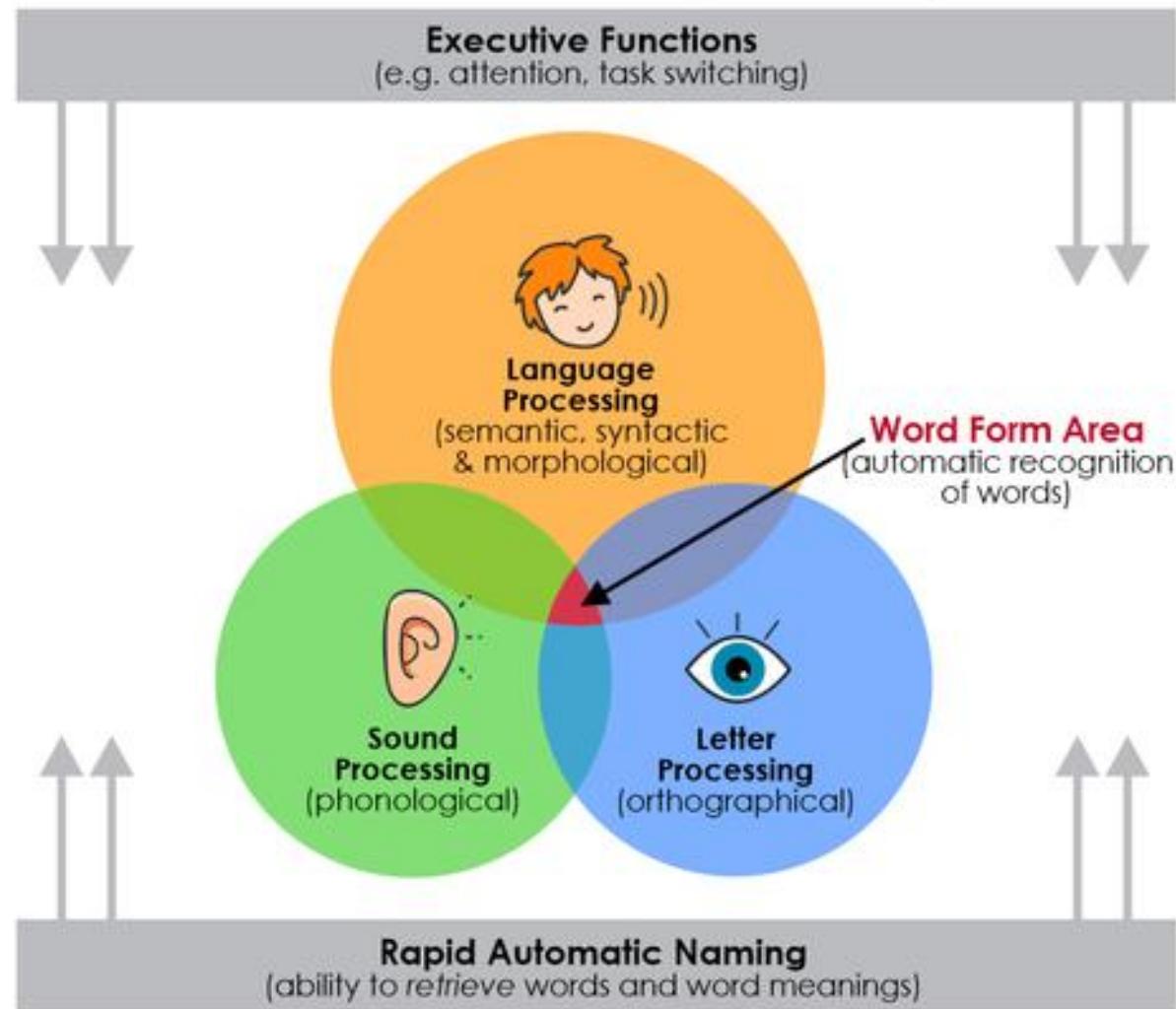
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Areas of reading difficulty



GOAL

- **Text Simplification for all users – cognitive disability**
ADHD and Dyslexic persons
- **Onboarding tutorial**
- **Learner (new):** quickly self-assess reading needs get an immediate, easier-to-read version of any text in their language
- **Learner (returning):** re-use a saved reading profile

CONTENT

- Easy navigation across website
- Text simplification
- Text to speech
- Text Summarization
- Readable text
- Low cognitive Load

FEATURES

- Language toggle: English / हिन्दी / Gujarati etc.
- **Text Summarization**
- Personalization controls : font choice, size, letter/word spacing, line height, paragraph width, contrast/theme, syllable/first-letter emphasis
- **TTS** (play/pause, rate)
- Live preview + progress feedback
- Profiles: save/share presets

User Requirements

- 1) Understandable content
- 2) Readable display
- 3) Simple actions & navigation
- 4) Audio & multimodal support
- 5) Guidance & feedback
- 6) Language & culture

User Study and Data Gathering

USERS – Healthy , no documented cognitive disability , students of class 10th , curriculum taught in Hindi medium

No. Of participants in user study = 2+ 1 ADHD user

- Done using wizard of oz prototyping style
- FIGMA clickable interactions were added as and when the participant expressed " think aloud" need of something.
- One of the group members “wizard” simplified the text and entered it into the text box for simplified text in our UI.

WIZARD OF OZ PROTOTYPING

INPUT :

अपठित गद्यांश प्रश्नपत्र का वह अंश होता है जो पाठ्यक्रम में निर्धारित पुस्तकों से नहीं पूछा जाता है। यह अंश साहित्यिक पुस्तकों पत्र-पत्रिकाओं या समाचार-पत्रों से लिया जाता है। ऐसा गद्यांश भले ही निर्धारित पुस्तकों से हटकर लिया जाता है परंतु, उसका स्तर, विषय वस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही होती है। प्रायः छात्रों को अपठित अंश कठिन लगता है और वे प्रश्नों का सही उत्तर नहीं दे पाते हैं। इसका कारण अभ्यास की कमी है।

OUTPUT:

A. Paragraph-based (सरल भाषा)

अपठित गद्यांश वह हिस्सा होता है जो सीधे पाठ्यपुस्तक से नहीं लिया जाता। इसे साहित्यिक पुस्तकों, पत्र-पत्रिकाओं या अखबारों से चना जाता है। भले ही यह अलग स्रोत से हो, इसका स्तर, विषय और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है। अधिकतर छात्रों को अपठित अंश कठिन लगता है, इसलिए वे प्रश्नों का सही उत्तर नहीं दे पाते। इसका मुख्य कारण अभ्यास की कमी है।

B. Bullet points (सरल बिंदु)

- अपठित गद्यांश** = पाठ्यपुस्तक से अलग लिया गया अंश
- स्रोत:** साहित्यिक पुस्तकें, पत्र-पत्रिकाएँ, समाचार-पत्र
- स्तर/भाषा-शैली:** पाठ्यपुस्तकों जैसी
- मशिकेल** क्यों लगता है: अभ्यास कम होने के कारण
- परिणाम:** कई छात्र सही उत्तर नहीं दे पाते

Interview questions : User Study

- Participants interacted with our text-simplification prototype language selection → brief pictorial questionnaire → paste/upload text → TTS and readability controls), while a hidden facilitator operated a ‘wizard’ panel to simulate backend intelligence , injecting a pre-written summary when needed, applying reading/understanding presets, and adjusting font/spacing/themes to match user feedback.
- This let us evaluate the flow and accessibility features without a full model in production.
- **Questions asked over online meet.**
- Findings directly informed the requirements for the real summarization engine and final UI.

Interview questions : User Study

Q. What text is most difficult for you to understand ?

Ans. English literature

Inclusion of answer : We added option to enter English text and included a translation feature to display summarized English text in their chosen language.

Q. Do you like bigger spaced text or normal text ?

Ans. Personal Preference. Some text needs spacing , sometimes it does not.

Inclusion of answer : Questionnaire for personalized text preference , saving of personalized profile , at the end of summarization – the display screen still has option to change how the text appears on screen

Interview questions : User Study

- Q. Do you like bullet points or paragraphs?

Ans. Bullet points help quick scanning. Most preferred bullet points.

- Initially we added both original text and summarized text on final screen , but the **ADHD user** reported distraction and higher cognitive load with so much text on screen. So, for the Reading aid final screen only summarized text is displayed on the final screen.

Use Case

- Text Simplification -> Text Summarization and TTS
- Text display and ease of customization -> Personalized text spacing and sizing
- Aid for better reading -> ADHD : bolding characters of text
 Dyslexia : bigger spaced-out text with highlighting the word pairs that cause confusion

User Journey for both the prototypes:

- 1.Open site
- 2.Click “Start”
- 3.Login as guest or user
- 4.Upload or type text
- 5.Choose text simplification options
- 6.Summarize text
- 7.Adjust:
 1. Spacing
 2. Size
 3. Font
 4. Speech speed
- 8.Translate if needed
- 9.Listen to speech output
- 10.End or restart

Both the prototypes have been developed only for Hindi – a vertical prototype style is taken for Hindi.

AI based Text Simplification Solutions

Prototype : [Link](#)

Text to Speech with
summarization

Prototype 1

More **vertical** depth only
focuses on TTS **for Hindi**
Language

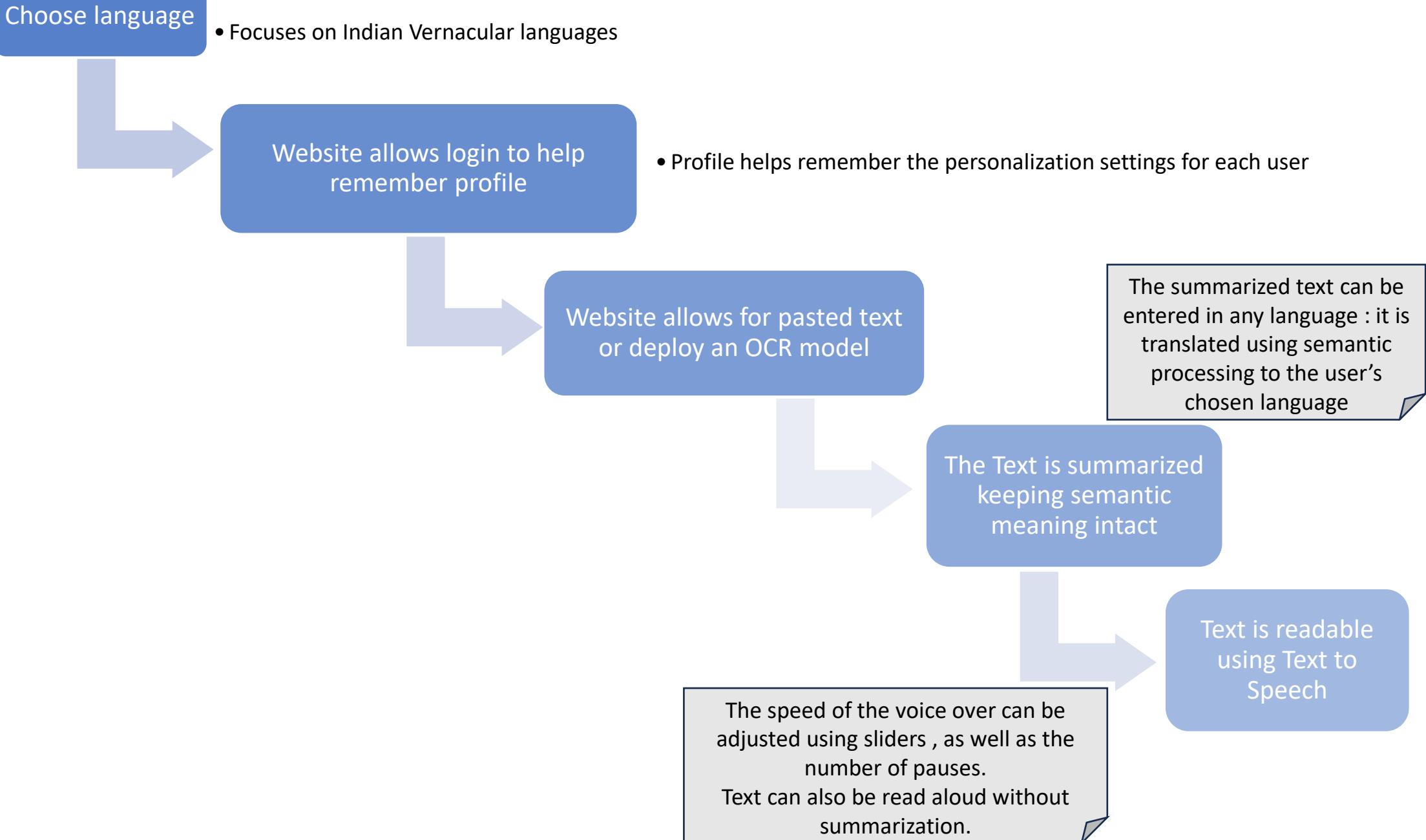
Text Summarization
with Reading Aid

Prototype 2

More **horizontal** depth with some
vertical depth – only for
Hindi, focuses on making reading
overall simpler with summarization
and reducing amount of text

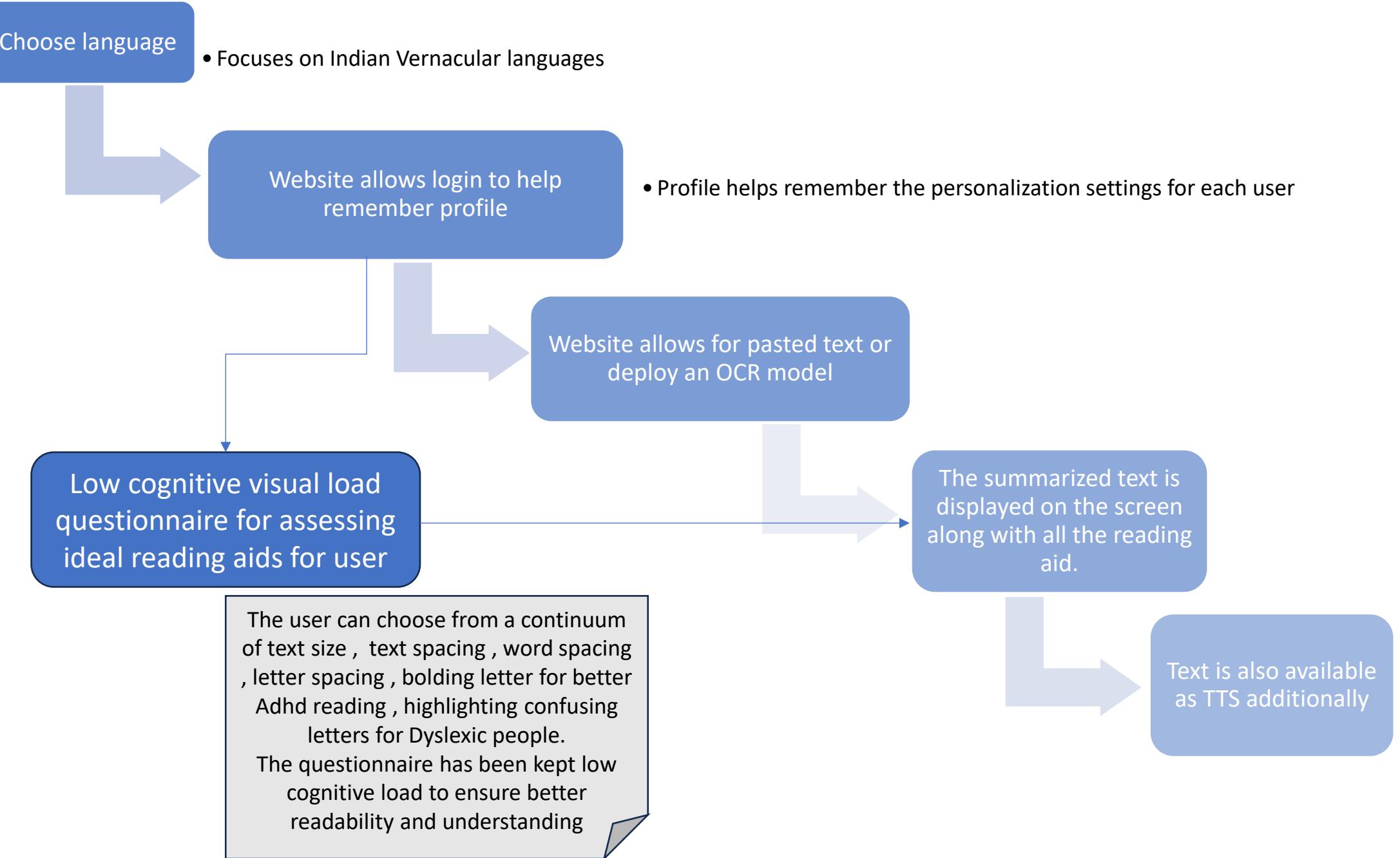
PROTOTYPE

1



PROTOTYPE

2



PROTOTYPE -1

Text to Speech
with
summarization



Text Simplification Solutions



User Profile

Users can log in to the website

Accessibility - first Learning for everyone

Get started



En



?Help

HELP icon and button

Page -1



Accessibility - first Learning for everyone

Get started



En



Start button

Users have to click the button to enter the website



Accessibility - first Learning for everyone

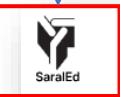
Get started



En

Start button icon

Users can click this option as well to have the same action as Get started button.

 
Text Simplification Solutions 

Accessibility - first Learning for everyone

[Get started](#) 

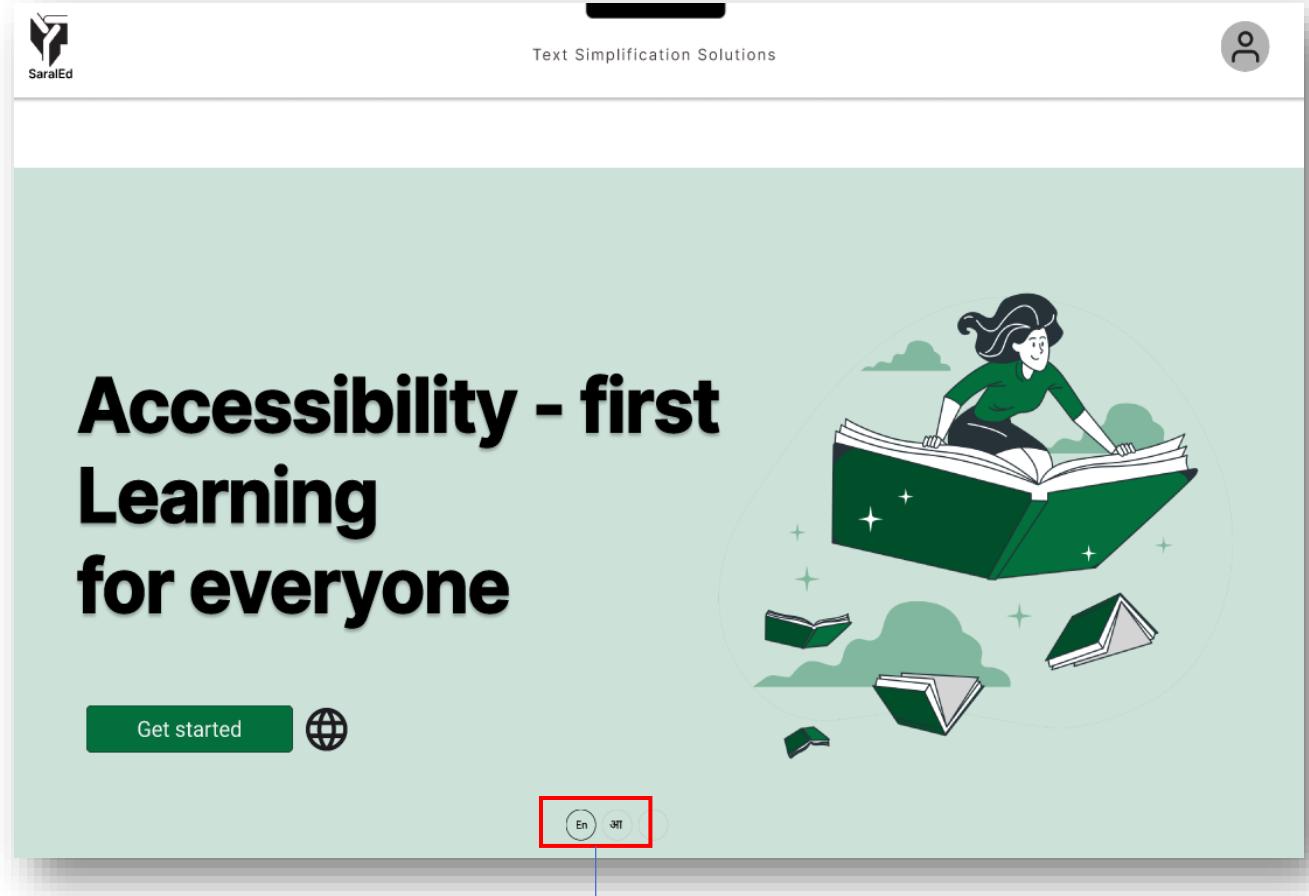
En   



Logo

Header.
Clicking on this logo on any page will lead to this page.

Page -1



Language button

Users can translate this webpage into either English or Hindi by clicking any button



Text Simplification Solutions



Choose your language

अपनी भाषा चुनें

Aa

English

અ

हिन्दी

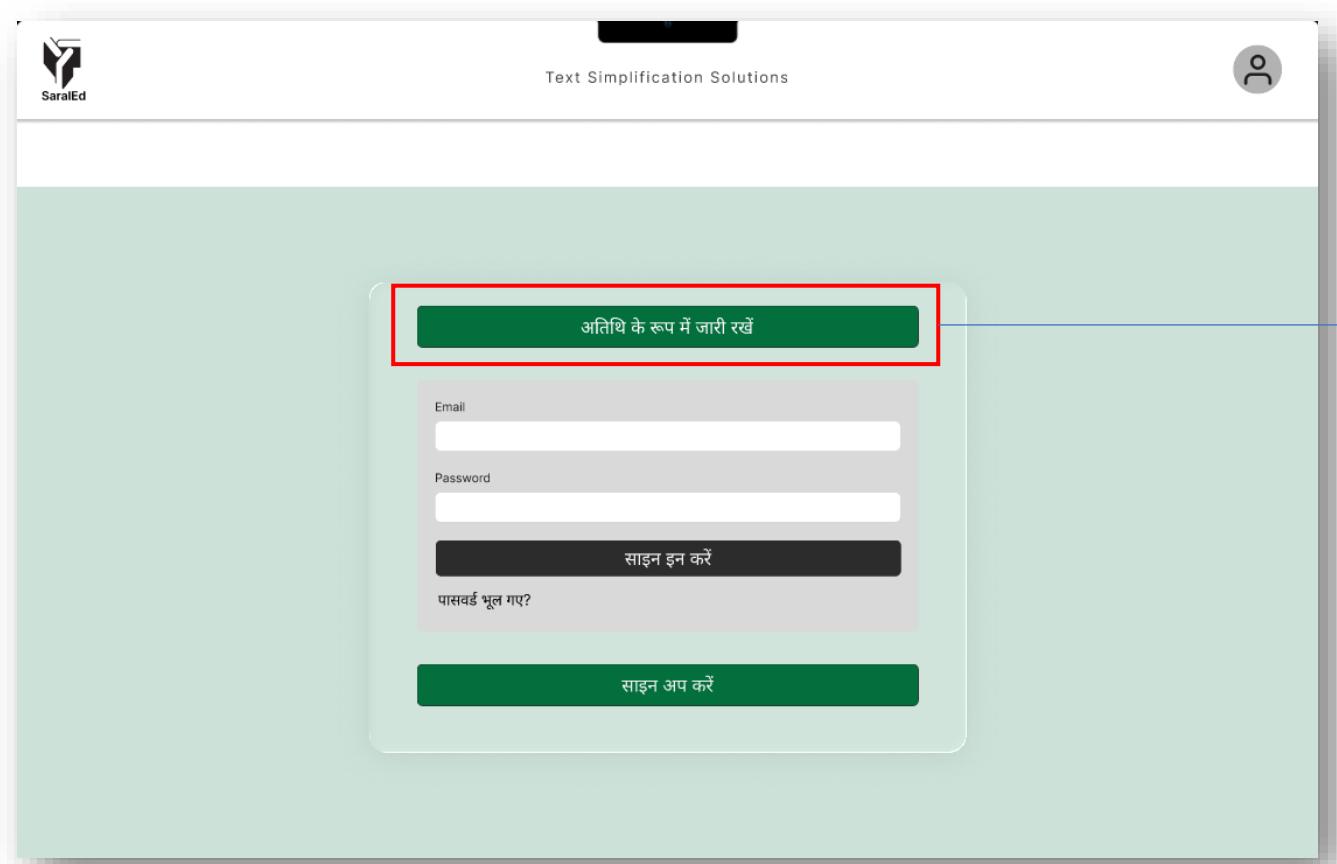
ચા

ગુજરાતી

సువర్గ

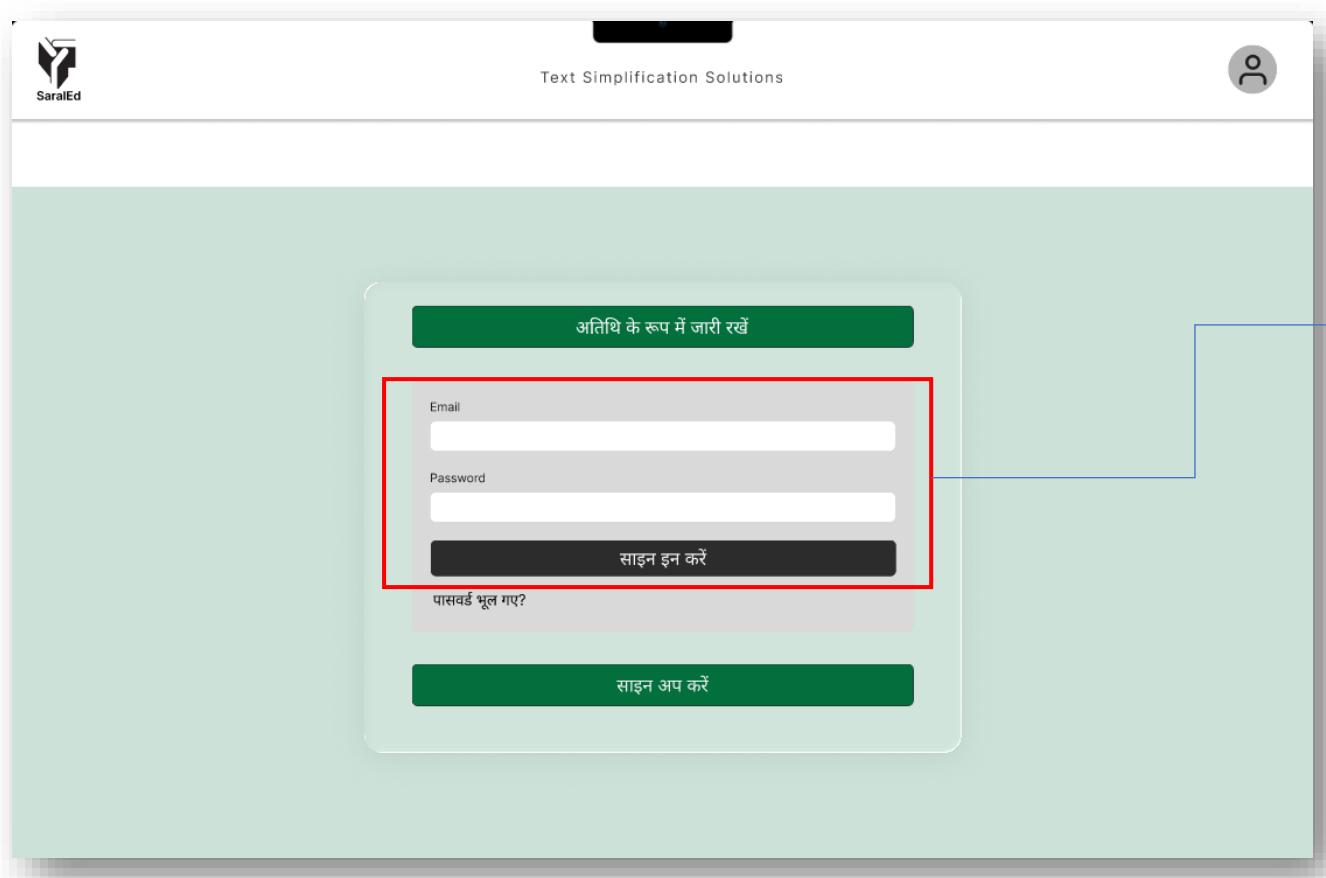
తెలుగు

Users can choose their language of choice.
Low cognitive load , big icons to facilitate easy choice.



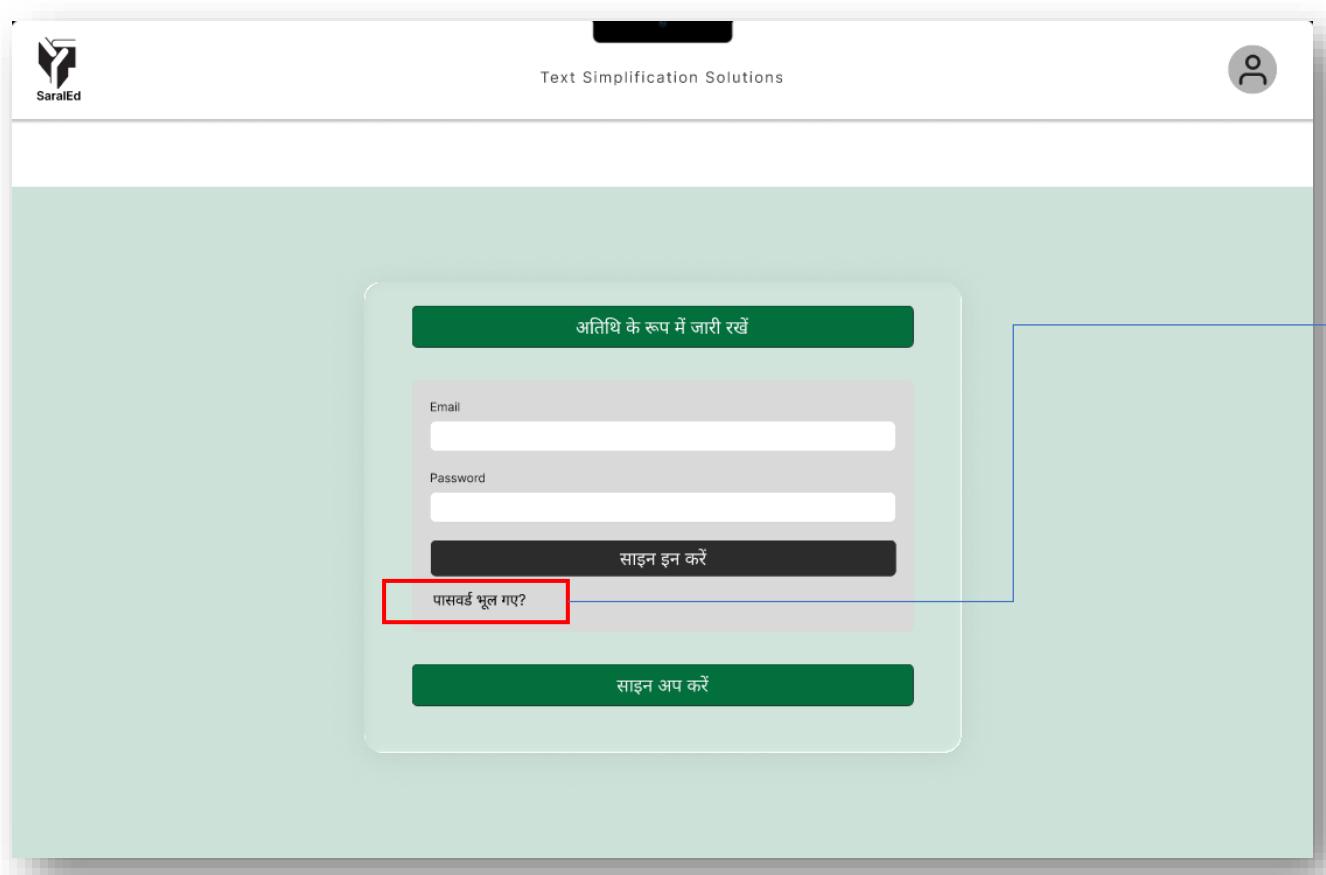
Enter as Guest

Users can continue using
without email / phone
login.
This way profile is not
saved.



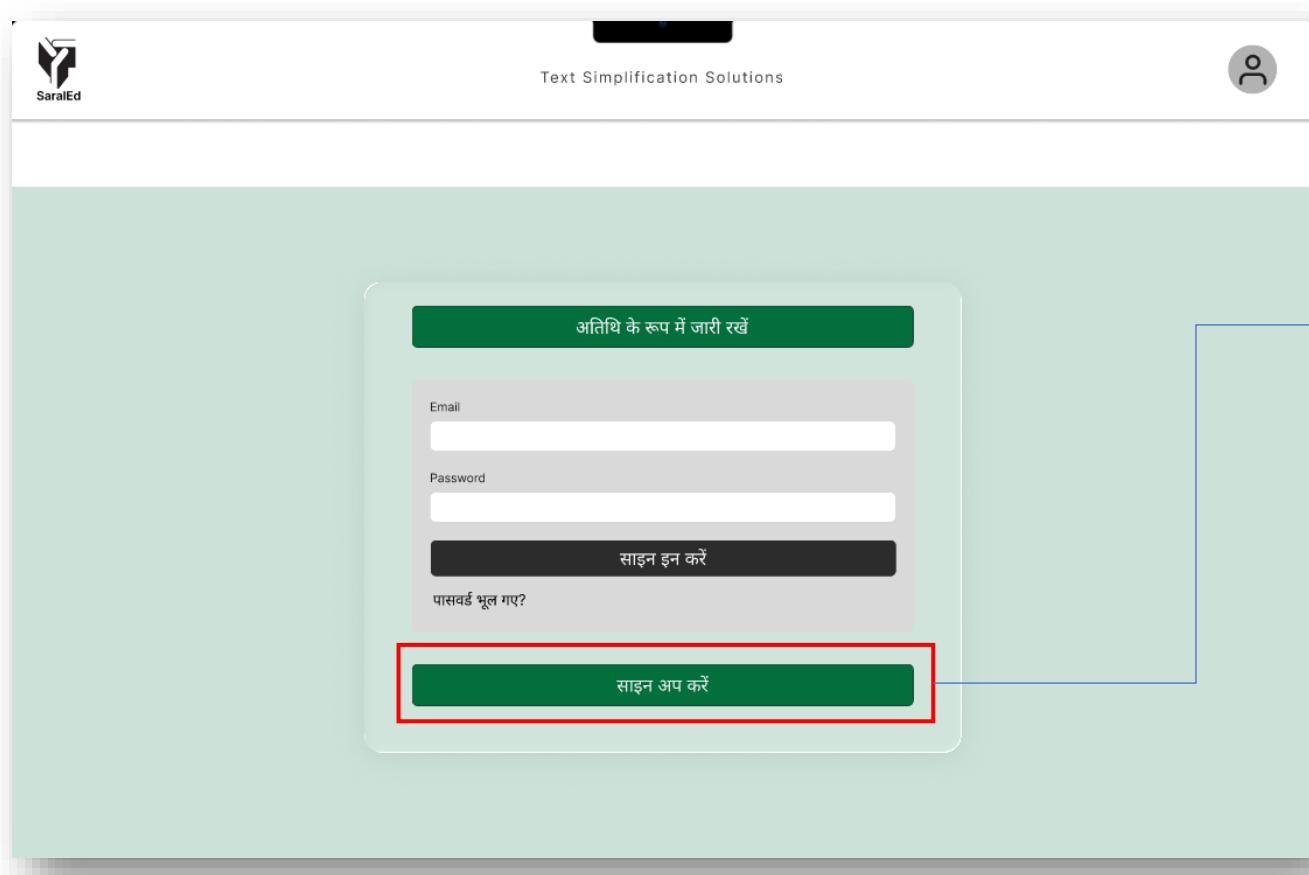
Log in options

Users can log in to access profile and saved personalization settings.



Forgot Password

Forgot password option to
create or change
password.



Sign in

Users can sign in using various sign-in options.

The screenshot shows a user interface for 'Text Simplification Solutions'. At the top left is the SaralEd logo. In the top center, the text 'Text Simplification Solutions' is displayed. On the top right is a user profile icon. A large green rectangular area in the center contains a white rounded rectangle with the text 'पाठ अपलोड करें' (Upload text). Below this is a smaller white rounded rectangle with the placeholder text 'यहां टेक्स्ट पेस्ट करें ...' (Paste text here ...). To the right of this input field is a document icon. A red rectangular border highlights the entire input area. At the bottom left is a black button labeled 'वापस' (Back), and at the bottom right is a black button labeled 'आगे' (Next). A blue arrow points from the text 'Upload options' to the highlighted input area.

पाठ अपलोड करें

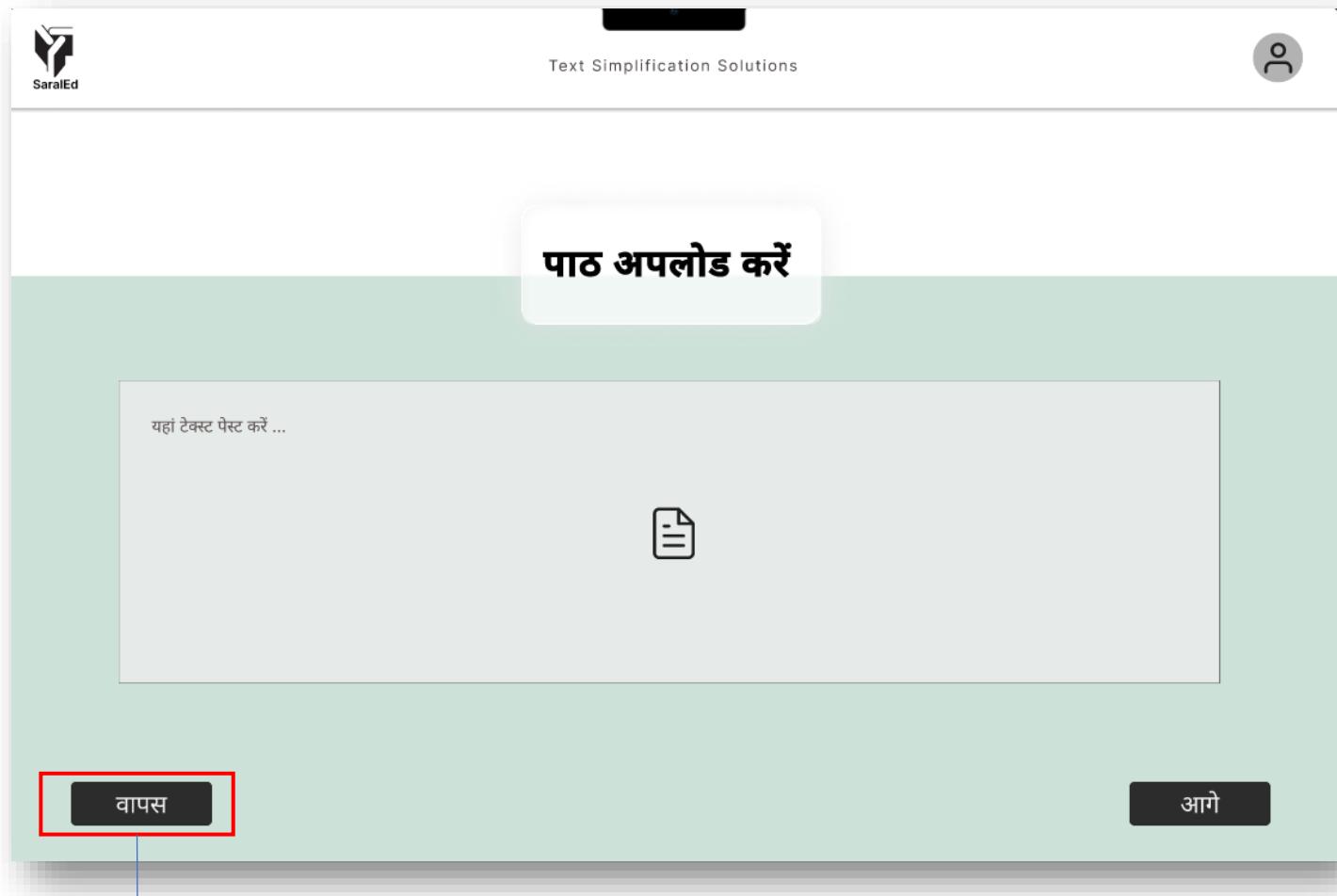
यहां टेक्स्ट पेस्ट करें ...

वापस

आगे

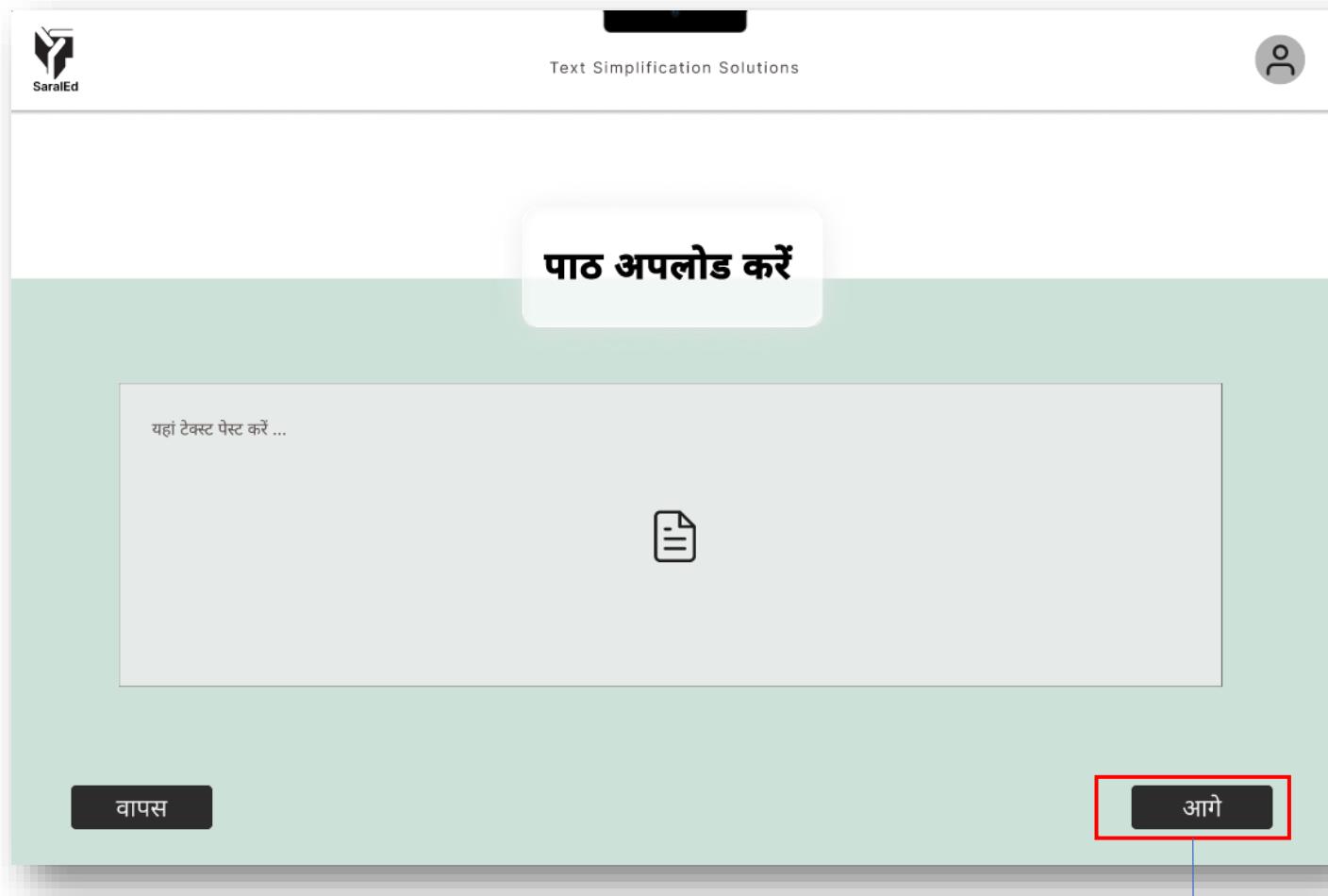
Upload options

Users can upload a file by clicking the document icon or type their text in this part.



Back option

Users can go back to previous page by clicking this button



Continue option

Users can go to next page by clicking this button



पाठ अपलोड करें



सरलीकरण करें

वापस

आगे

Summarize option

Users can start summarizing the text, when clicked.



Language control option

Users can choose language
of speech by clicking here.

 Text Summarization

टेक्स्ट का साइज़

पंक्तियों के बीच का अंतर

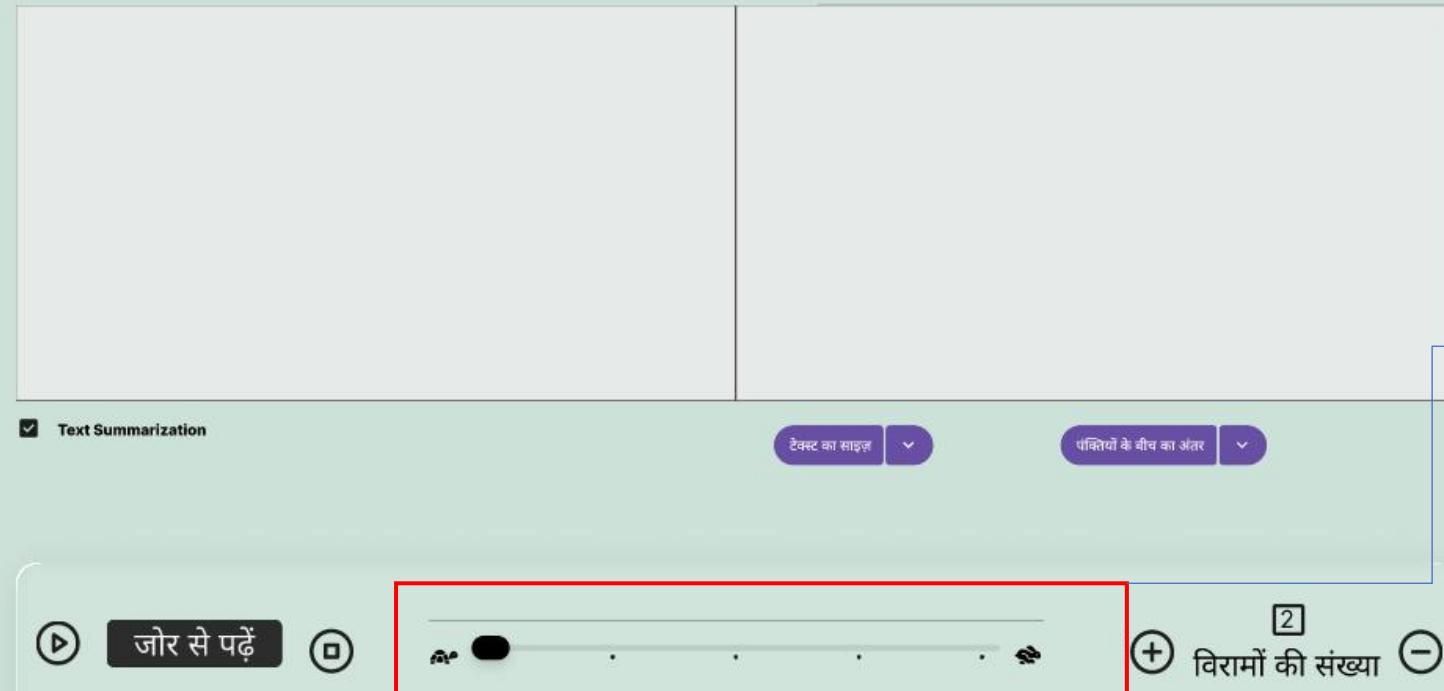


जोर से पढ़ें

विरामों की संख्या ^२

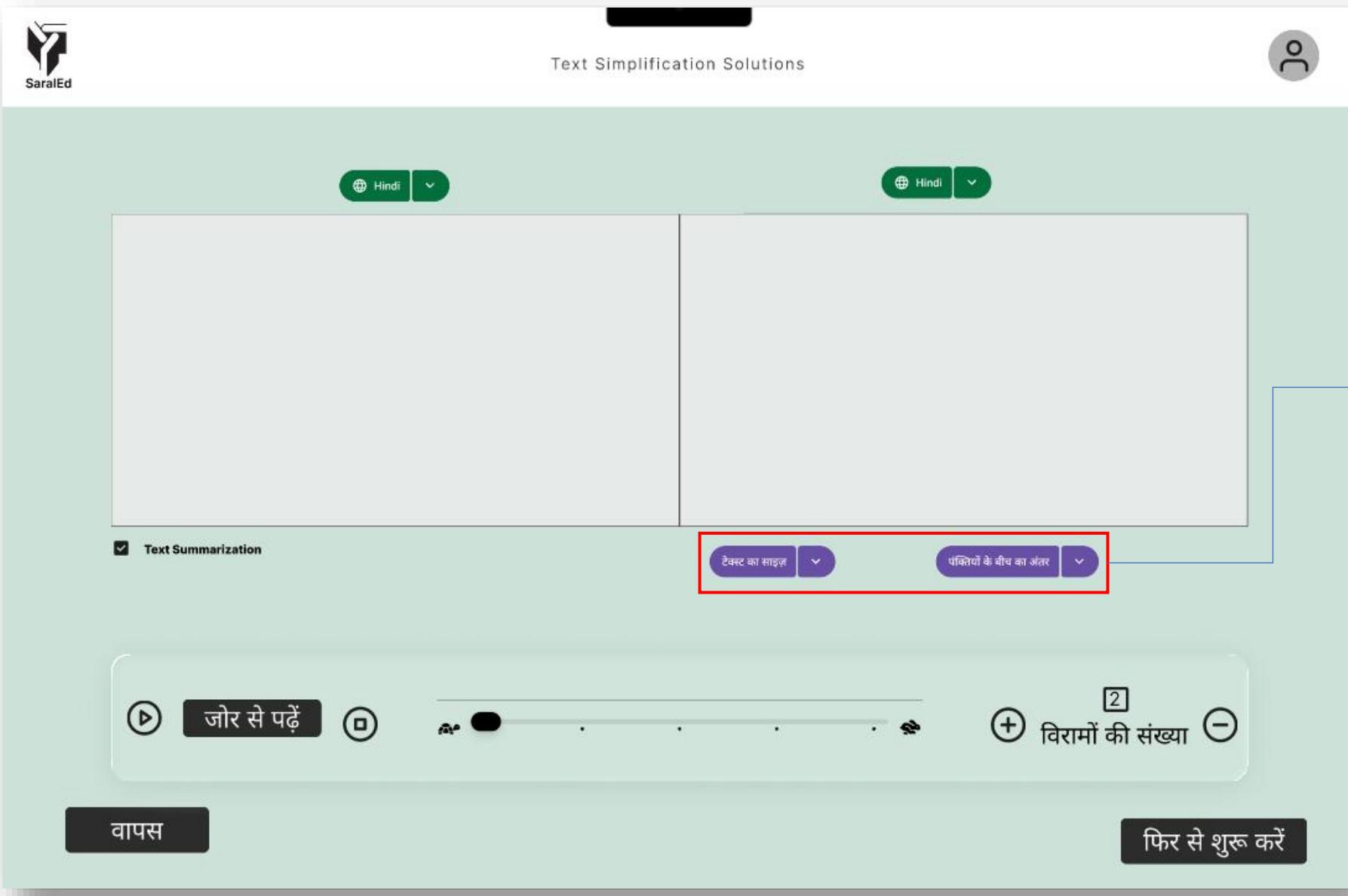
वापस

फिर से शुरू करें



Speed control option

Users can control speech by moving the appropriate speech controls.



The screenshot shows a web-based application for text simplification. At the top, there are two language selection dropdowns, both set to "Hindi". In the top right corner, there is a user profile icon. Below the language dropdowns, there are two large empty rectangular boxes side-by-side. A blue arrow points from the right edge of the second box towards a green callout box labeled "Text spacing option". In the bottom left area, there is a checked checkbox labeled "Text Summarization". Below it, there are two purple dropdown menus with the text "टेक्स्ट का साइज़" and "पंक्तियों के बीच का अंतर" respectively. A red rectangle highlights these two dropdowns. A blue arrow points from the right edge of this red box towards a green callout box labeled "Users can control speech by moving the appropriate speech controls.". In the bottom center, there is a slider with a play button icon and the text "जोर से पढ़ें". To the right of the slider, there is a circular volume icon with a play button. Further right, there is a text input field with a plus sign and a minus sign, containing the text "विरामों की संख्या" with a small superscript "2". Below these controls, there are two buttons: "वापस" on the left and "फिर से शुरू करें" on the right. At the very bottom, there is a progress bar with a play button icon.

Text spacing option

Users can control speech by moving the appropriate speech controls.

Pauses in speech option

Text Simplification Solutions

Hindi

Hindi

Text Summarization

टेक्स्ट का साइज़

पंक्तियों के बीच का अंतर

जोर से पढ़ें

वापस

फिर से शुरू करें

+ 2 विरामों की संख्या -

Change number of pauses
in speech

Users can control speech
pauses by increasing or
decreasing.

Text Simplification Solutions

Hindi

Hindi

Text Summarization

टेक्स्ट का साइज़

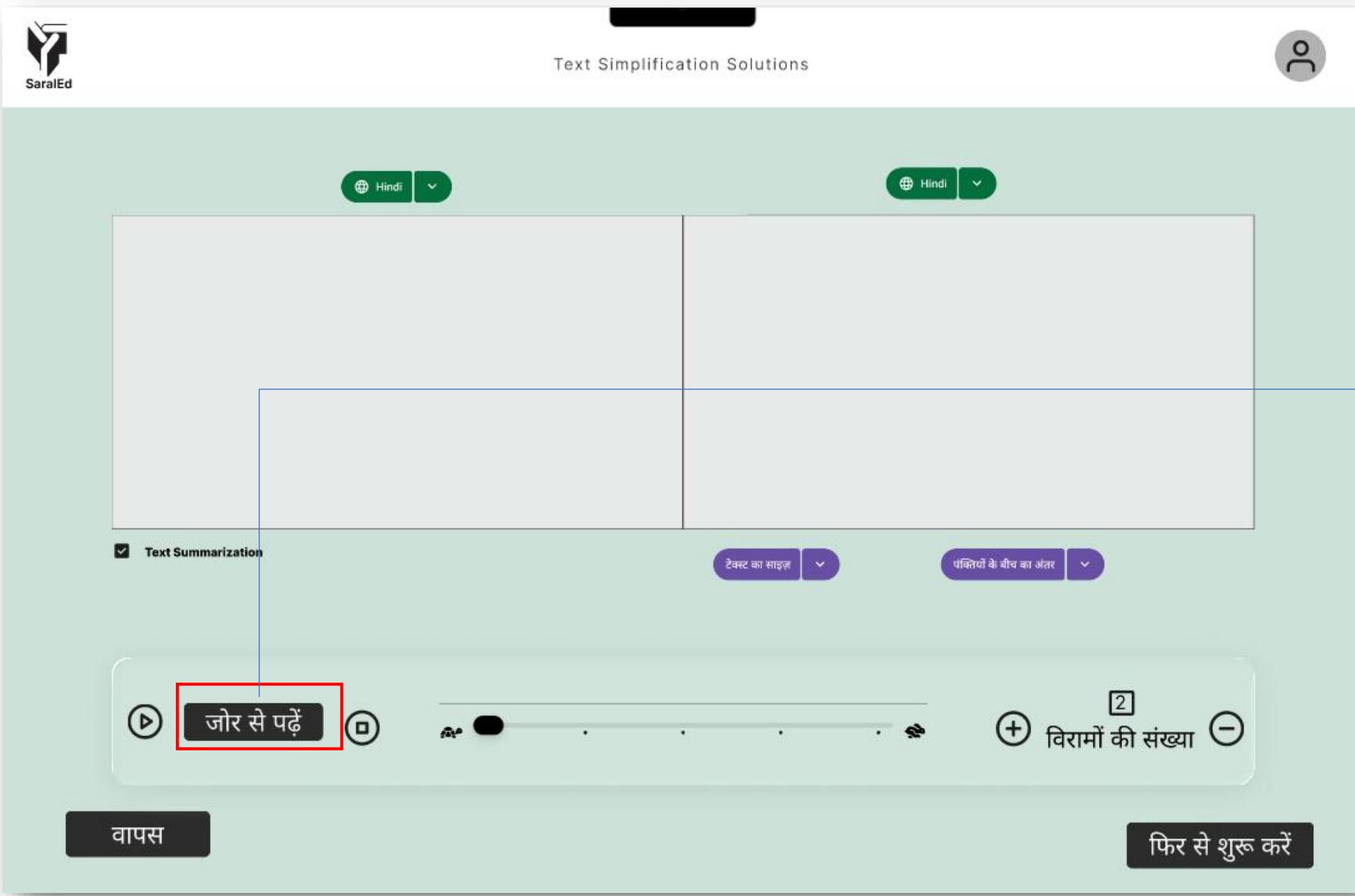
पंक्तियों के बीच का अंतर

जोर से पढ़ें

विरामों की संख्या

वापस

फिर से शुरू करें



Read aloud

Users can choose this option to apply TTS on summarized text/

Pauses in speech option

Text Simplification Solutions

Hindi

Hindi

Text Summarization

टेक्स्ट का साइज़

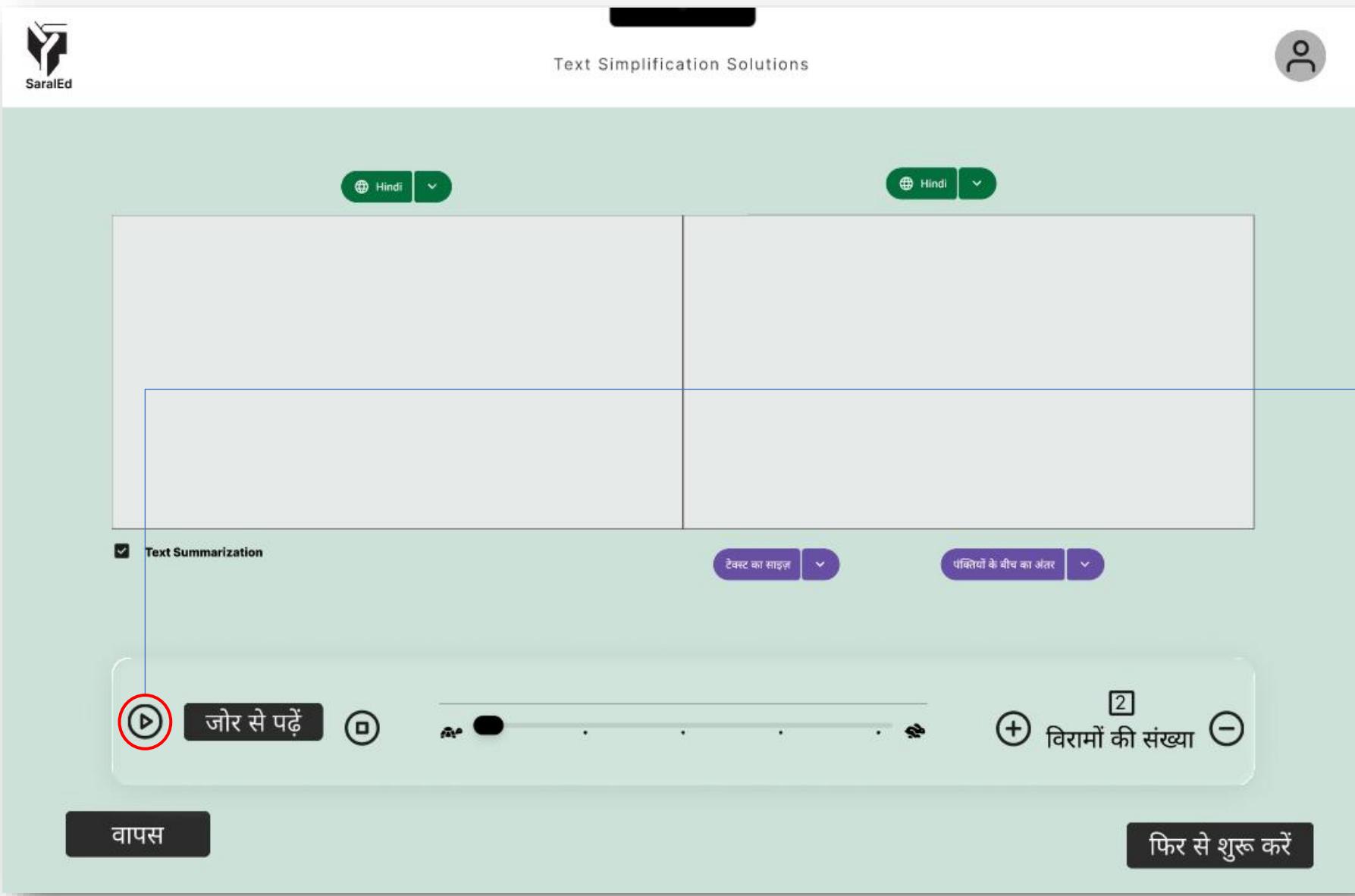
पंक्तियों के बीच का अंतर

जोर से पढ़ें

विरामों की संख्या

फिर से शुरू करें

वापस



Play

Users can click this option to start playing audio aloud

Pauses in speech option

Text Simplification Solutions

Hindi

Hindi

Text Summarization

टेक्स्ट का साइज़

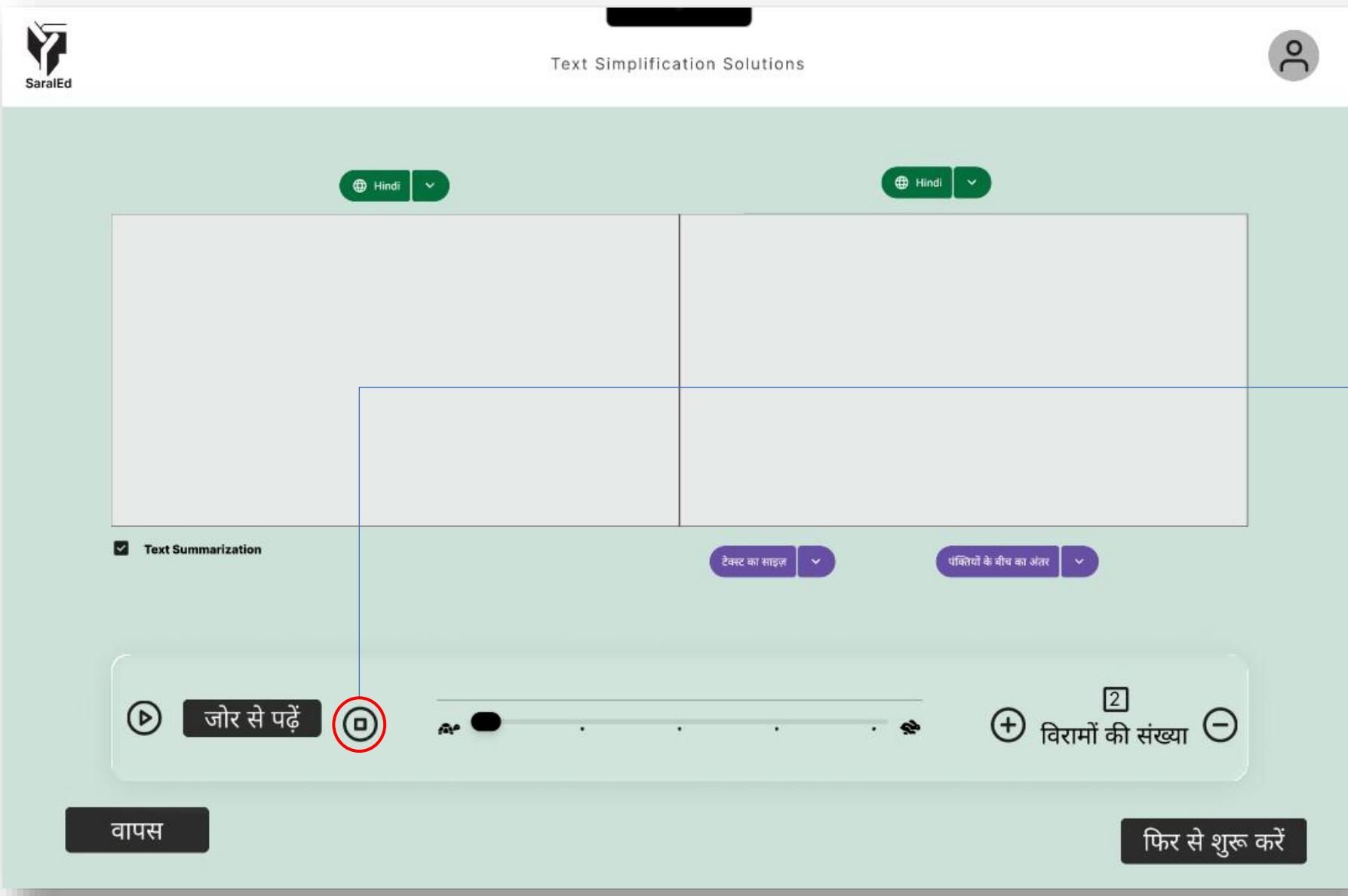
पंक्तियों के बीच का अंतर

जोर से पढ़ें

विरामों की संख्या

पास

फिर से शुरू करें



Pause

Users can click this option to pause the playing audio.

Pauses in speech option

Text Simplification Solutions

Hindi

Hindi

Text Summarization

टेक्स्ट का साइज़

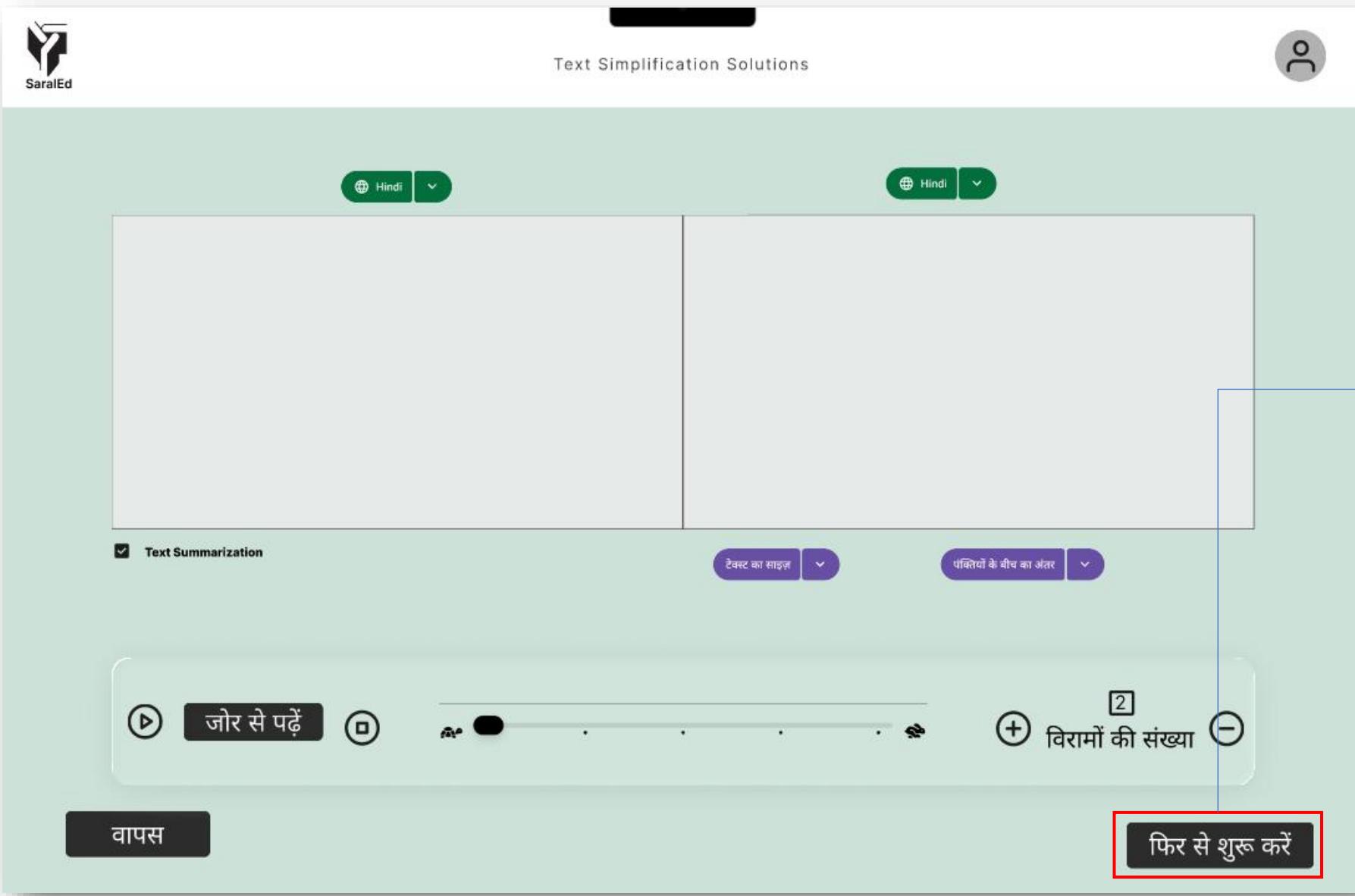
पंक्तियों के बीच का अंतर

जोर से पढ़ें

वापस

+ 2 विरामों की संख्या -

फिर से शुरू करें



Reupload option

Users are given a choice to upload again.

PROTOTYPE -2

Text
Summarization
with Reading Aid



Accessibility - first Learning for everyone

Get started





Text Simplification Solutions



User Profile

Users can log in to the website

Accessibility - first Learning for everyone

Get started



En



Page -1



Accessibility - first Learning for everyone

Get started



En



Start button

Users have to click the button to start the website



Accessibility - first Learning for everyone

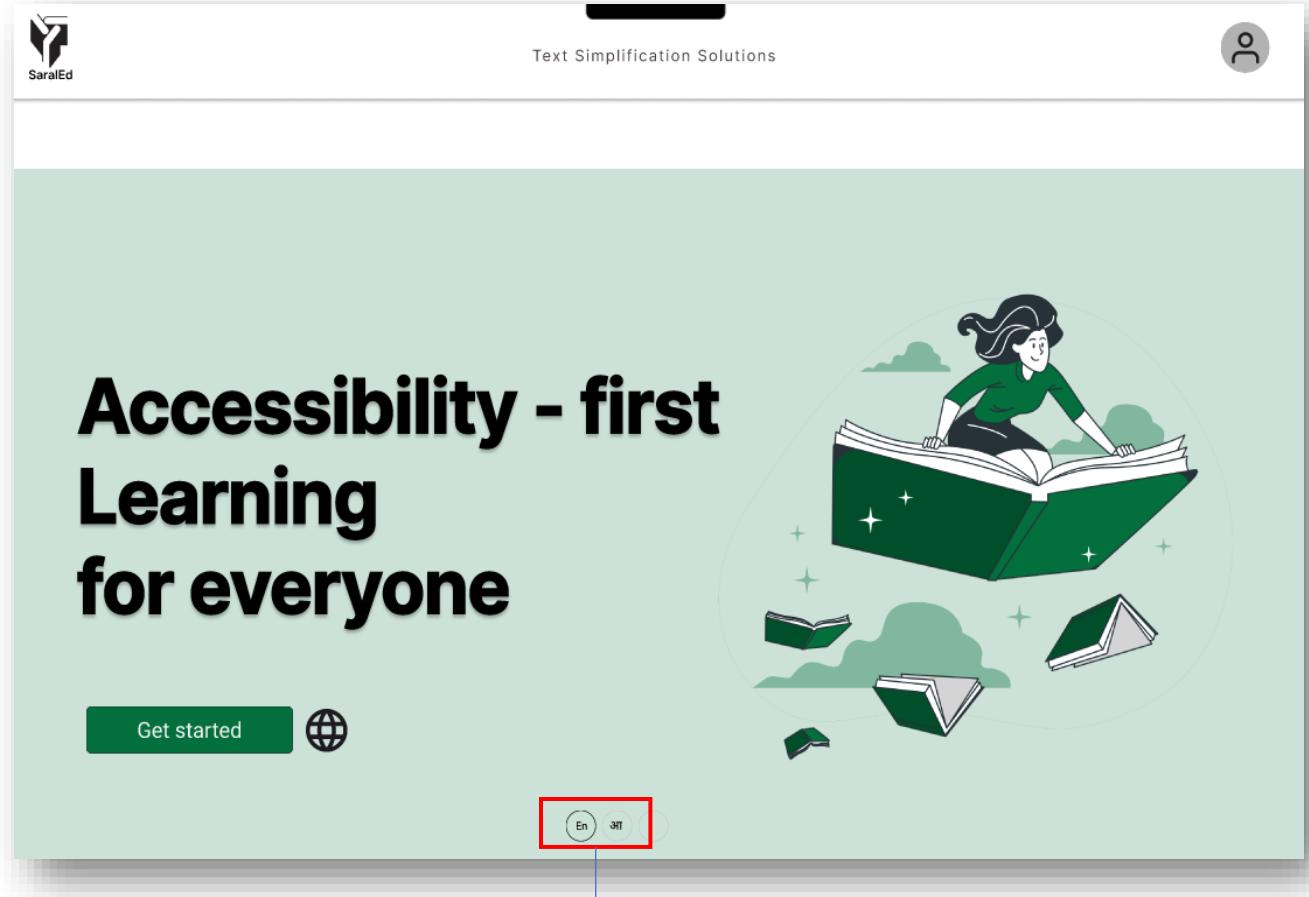
Get started



En

Start button icon / language

Users can click this option as well to have the same action as Get started button.



Language button

Users can translate this webpage into either English or Hindi by clicking any button



Text Simplification Solutions



Choose your language

अपनी भाषा चुनें

Aa

English

અ

हिन्दी

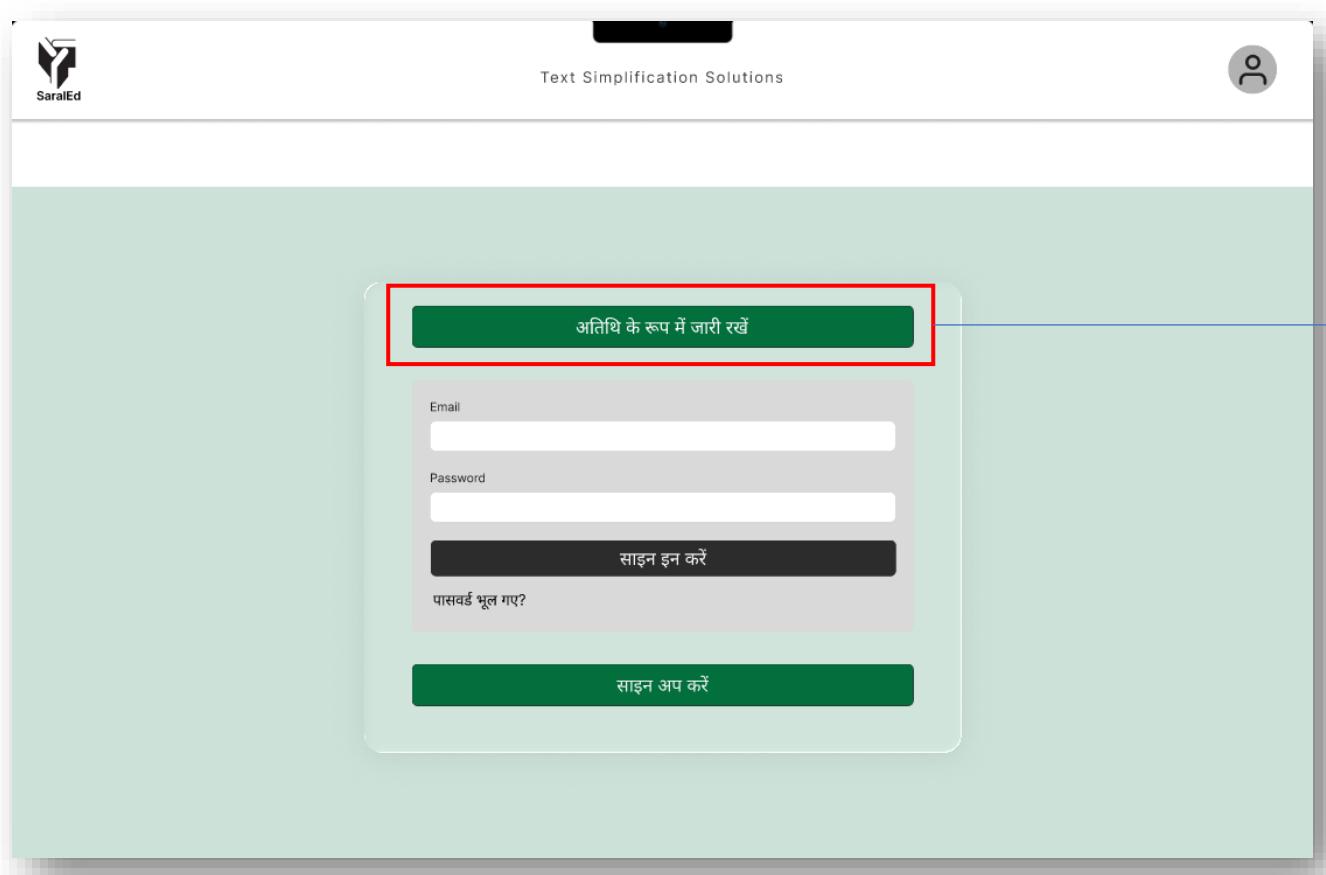
ચી

ગુજરાતી

స్వర్గ

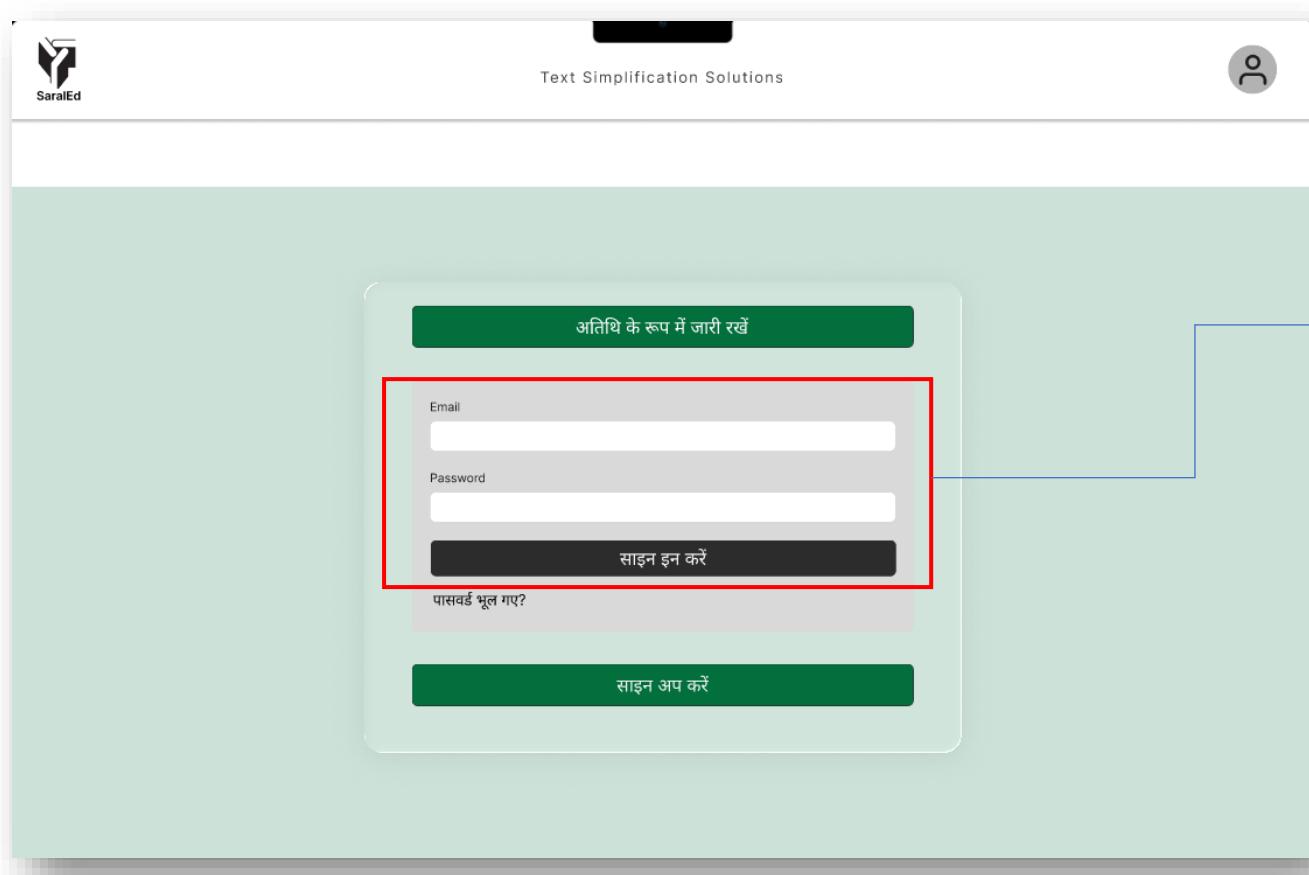
తెలుగు

Users can choose their language of choice. Low cognitive load , big icons to facilitate easy choice.



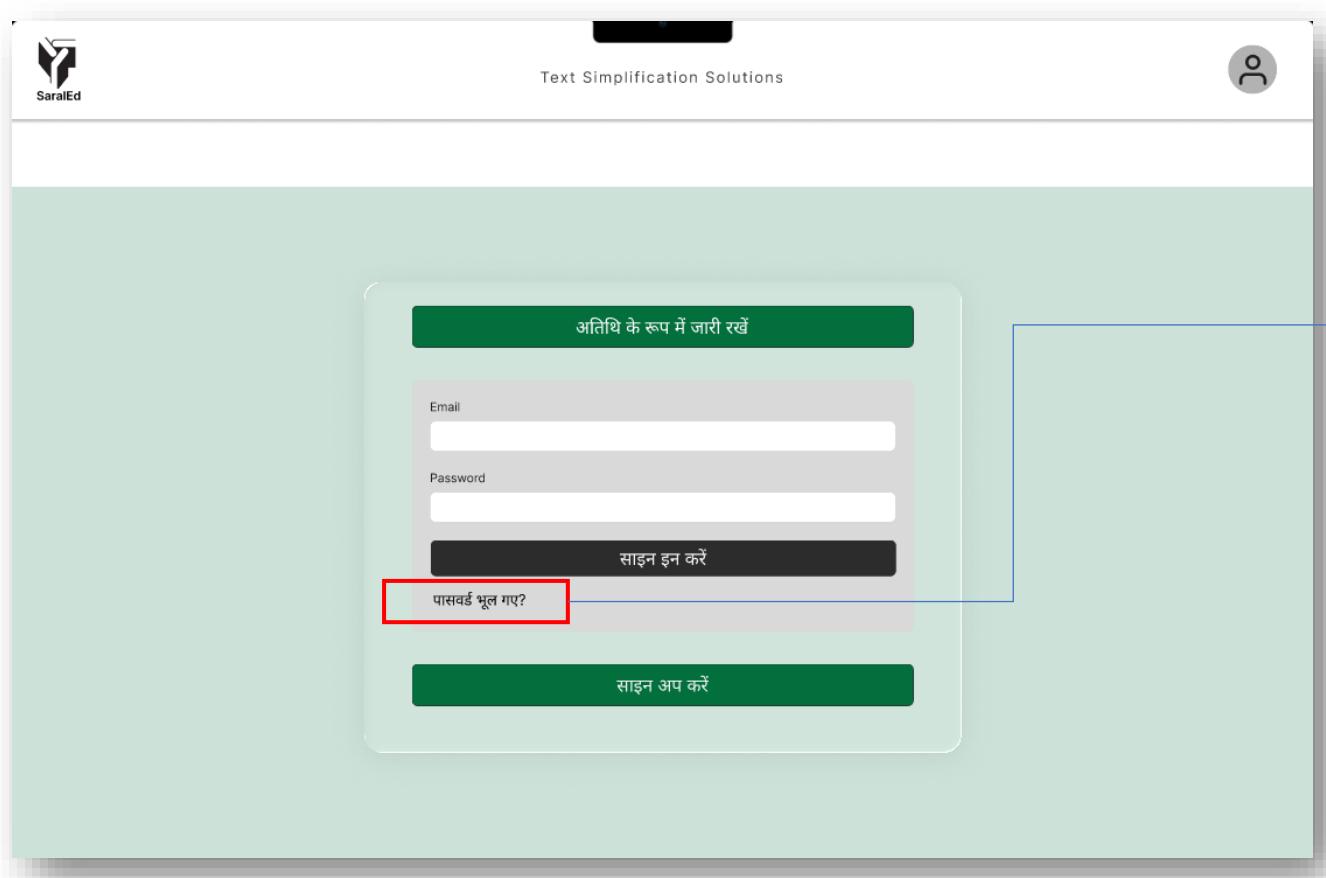
1. Guest

Users can log in as a guest.



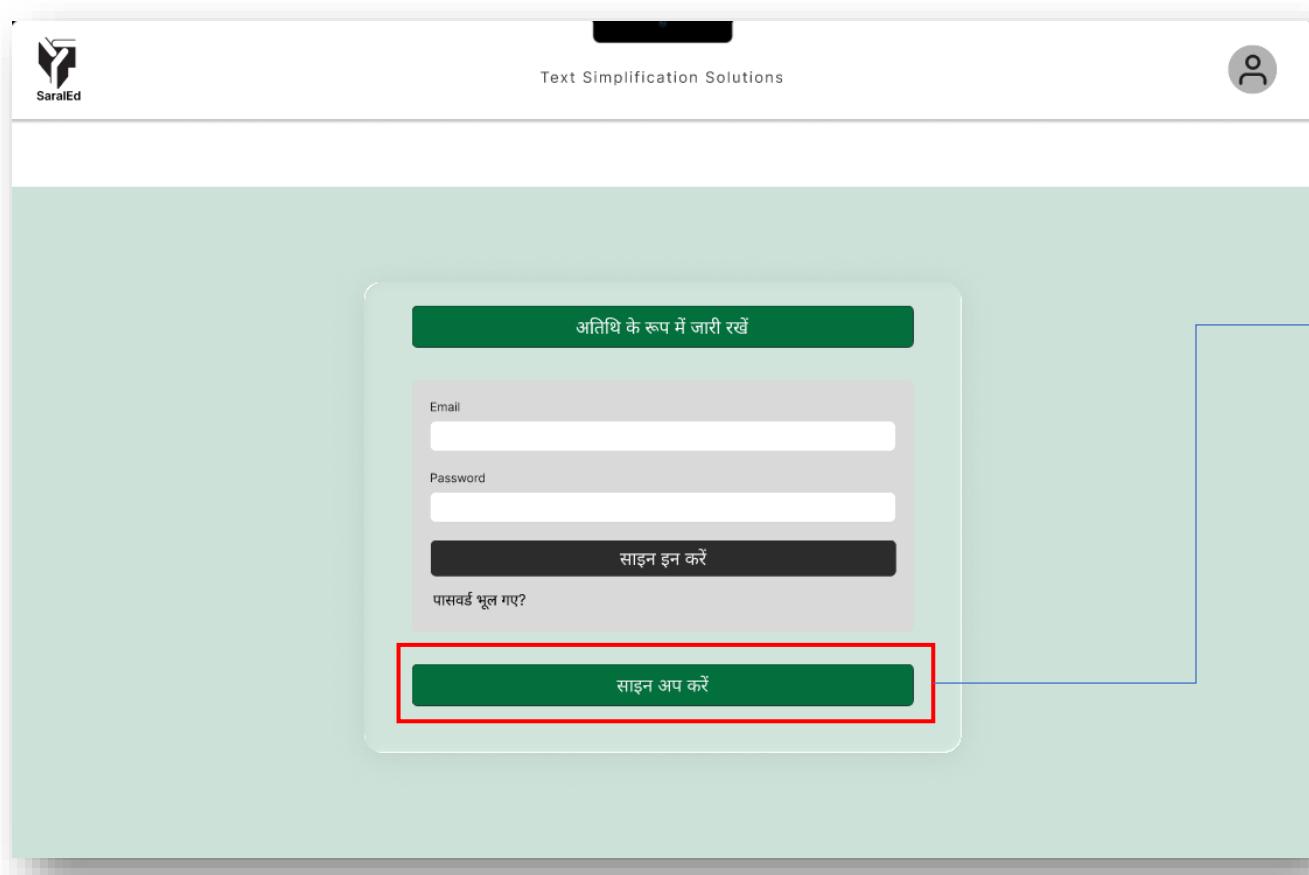
Log in options

Users have to log in if not already



Forgot Password

Forgot password option to
create or change
password.



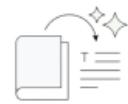
Sign in

Users can sign in using various sign-in options.

The screenshot shows the homepage of the SaralEd app. At the top left is the SaralEd logo. In the center, the text "Text Simplification Solutions" is displayed above a small icon of an open book with three stars above it. At the top right is a user profile icon. Below the header is a large green rectangular area containing a white speech bubble with the text "आइये आपको बेहतर तरीके से जानें" and a speaker icon. A blue arrow points from this text area to a green button labeled "प्रारंभ करें" which is enclosed in a red rectangular border. At the bottom left of the green area is a black button labeled "वापस". To the right of the green area is a dark green rectangular box containing the text "Start option". A blue arrow points from the "प्रारंभ करें" button to this box. Below the green area is a light blue box containing the text: "Users can start the text personalization questionnaire using this button."



Text Simplification Solutions



ट्यूटोरियल देखें

प्रश्नावली पर जाएं



Go to Questionnaire

Users can start the text personalization questionnaire using this button.

Page-5



Text Simplification Solutions



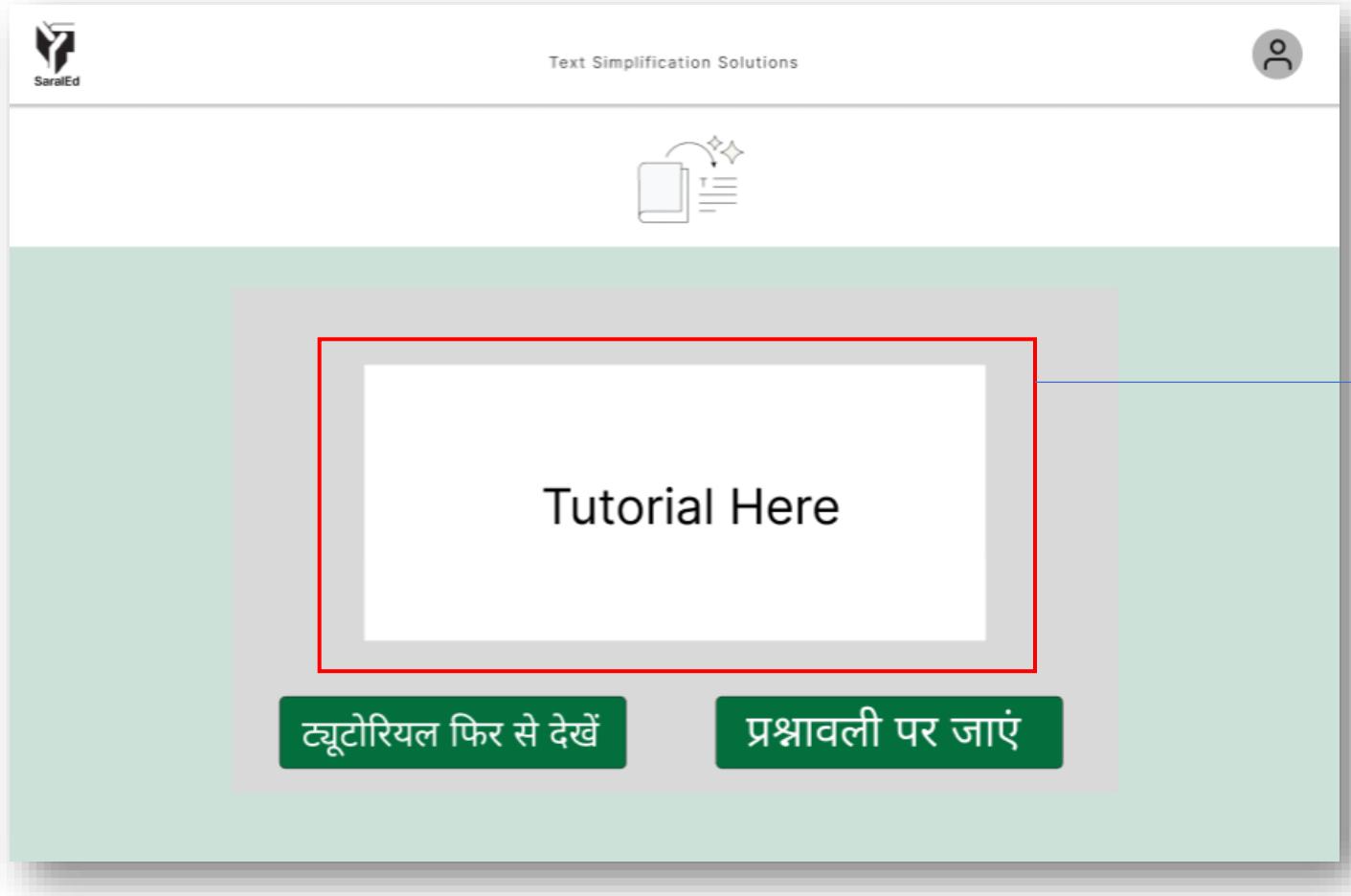
ट्यूटोरियल देखें

प्रश्नावली पर जाएं

Watch Tutorial

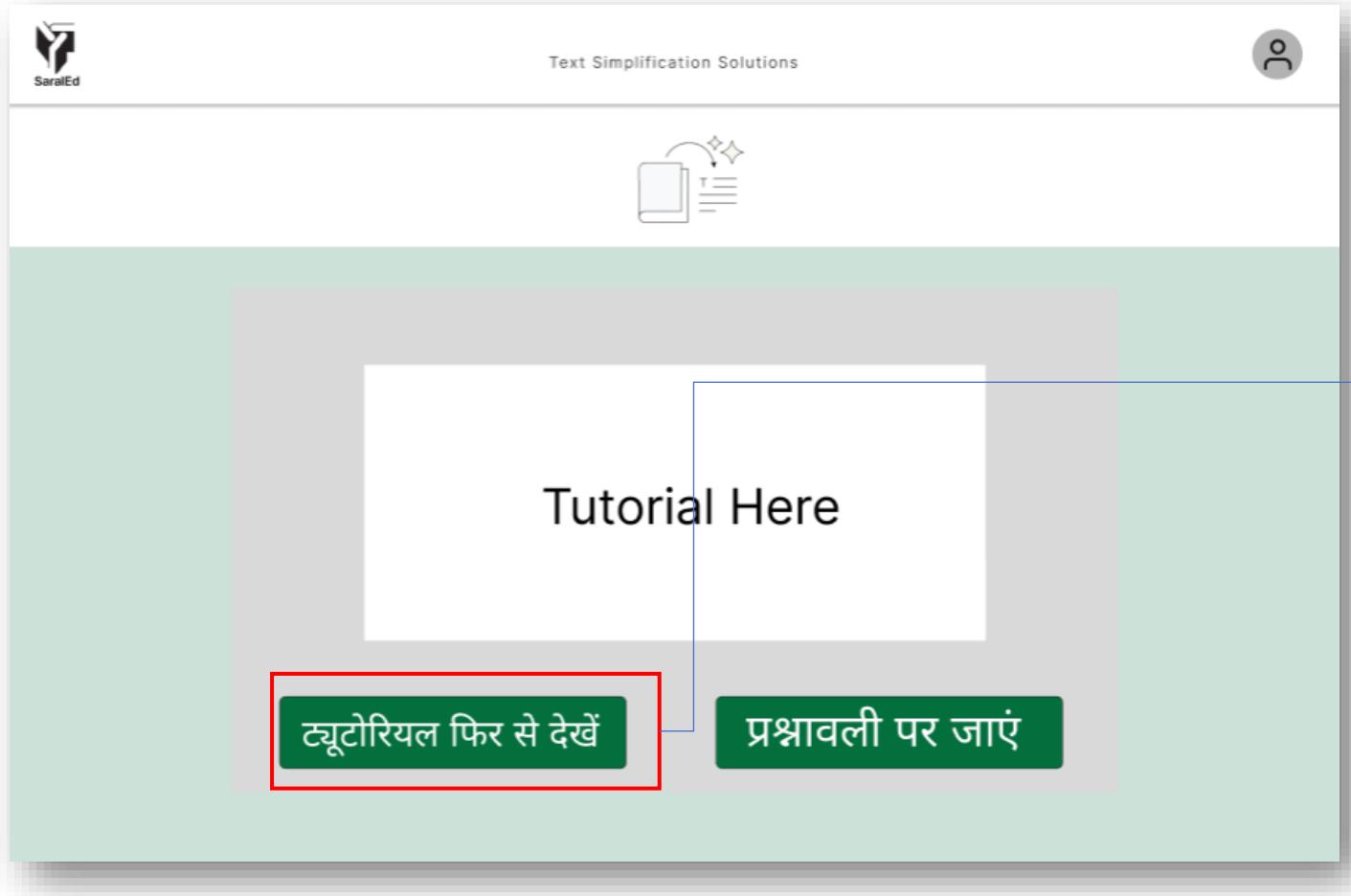
Users can click this button
to start the tutorial video.

Page-5



Tutorial Video

User can watch tutorial video to understand how to use the application.



Re-watch the tutorial

User can click this to
watch the tutorial again.

The screenshot shows a user interface for 'Text Simplification Solutions'. At the top left is the SaralEd logo. In the top center, it says 'Text Simplification Solutions'. On the top right is a user profile icon. Below the header, there's a decorative icon of an open book with a small star above it. A large green rectangular area contains a white box with the text 'Tutorial Here'. At the bottom of this green area are two green buttons with white text: 'व्यूटोरियल फिर से देखें' and 'प्रश्नावली पर जाएं'. The second button is highlighted with a red border. A blue arrow points from this button to a green rectangular call-to-action button on the right that says 'Go to Questionnaire'. Another blue arrow points from the 'प्रश्नावली पर जाएं' button to a light blue callout box below it, which contains the text: 'Users can start the text personalization questionnaire using this button.'

Tutorial Here

व्यूटोरियल फिर से देखें

प्रश्नावली पर जाएं

Go to Questionnaire

Users can start the text personalization questionnaire using this button.



कश्ती में गूंजे झांकार , झुंझुने की धुन से भरपूर , यह
व्याकरण का अभ्यास, वर्णमाला का पूरा दौर



टेक्स्ट का साइज़



पंक्तियों के बीच का अंतर



अक्षरों के बीच की दूरी



शब्दों में अंतर

वापस

आगे

Pangram filler example
text

Users can see the text,
which can be customized
in various ways

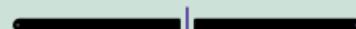
The screenshot shows a mobile application interface for text simplification. At the top left is the SaralEd logo, followed by the text "Text Simplification Solutions". At the top right is a user icon. The main area contains a heading in Hindi: "कश्ती में गूंजे झाँकार , झुंझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर". Below the heading are four horizontal bars with blue pointers, each labeled in Hindi: "टेक्स्ट का साइज़", "पंक्तियों के बीच का अंतर", "अक्षरों के बीच की दूरी", and "शब्दों में अंतर". A red box highlights the first two options. A blue arrow points from the "पंक्तियों के बीच का अंतर" section to a green box labeled "Text spacing options". At the bottom left is a "वापस" button, and at the bottom right is an "आगे" button.

Text spacing options

Users can change the word spacing by dragging the pointer. The pangram above will respond to these changes to display the text according to user's ideals.



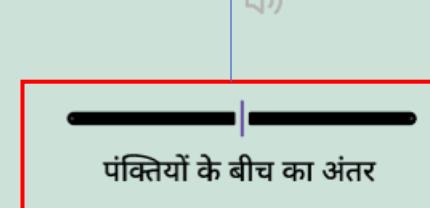
कश्ती में गुंजे झांकार , झुंझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर



टेक्स्ट का साइज़



अक्षरों के बीच की दूरी



पंक्तियों के बीच का अंतर



शब्दों में अंतर

वापस

आगे

Font size option

Users can change the character size by dragging the pointer.

The screenshot shows a mobile application interface for text simplification. At the top left is the SaralEd logo, followed by the text "Text Simplification Solutions". At the top right is a user icon with the number "8". Below the header is a large text box containing the Hindi sentence: "कश्ती में गुंजे झँकार , झुंझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर". Above the text box is a double-headed arrow icon. Below the text box are four horizontal bars with a blue pointer indicating spacing options:

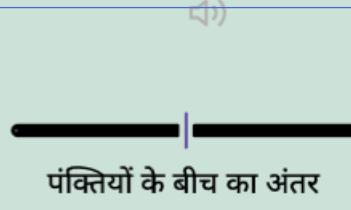
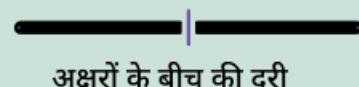
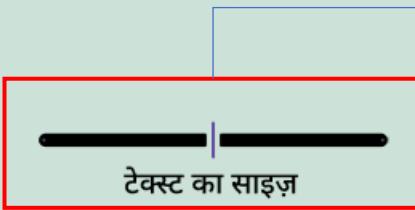
- टेक्स्ट का साइज़ (Text Size)
- पंक्तियों के बीच का अंतर (Line Spacing)
- अक्षरों के बीच की दूरी (Letter Spacing) - This option is highlighted with a red border.
- शब्दों में अंतर (Word Spacing)

At the bottom left is a "वापस" (Back) button, and at the bottom right is an "आगे" (Next) button.

Spacing option

Users can change the spacing between letters by dragging the pointer.

कश्ती में गुंजे झंकार , झुंझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर



वापस

आगे

Text size option

Users can change the text size by dragging the pointer.

The screenshot shows a mobile application interface. At the top left is the SaralEd logo, which includes a stylized 'Y' icon and the text 'SaralEd'. In the top center, it says 'Text Simplification Solutions'. On the top right is a user profile icon. Below the header, the title 'बेहतर विकल्प चुनें' (Choose better options) is displayed in a white box. The main content area contains two text snippets, each enclosed in a rounded rectangular box. The first snippet on the left is highlighted with a red border. Both snippets contain identical text: 'कश्ती में गूंजे झंकार, झुँझुने की धुन से भरपूर, यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौरा।' At the bottom left is a 'वापस' (Back) button, in the center are three green dots indicating a scrollable list, and at the bottom right is an 'आगे' (Next) button.

कश्ती में गूंजे झंकार, झुँझुने की धुन से
भरपूर, यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौरा।

कश्ती में गूंजे झंकार, झुँझुने की धुन से
भरपूर, यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौरा।

वापस

आगे

1. Normal Text is preferred for healthy users.

The screenshot shows a mobile application interface. At the top left is the SaralEd logo, which includes a stylized 'Y' icon and the text 'SaralEd'. In the top center, it says 'Text Simplification Solutions'. On the top right is a user profile icon. Below the header, the title 'बेहतर विकल्प चुनें' (Choose better options) is displayed in a white box. The main content area contains two identical text snippets, each enclosed in a red rectangular box:

कश्ती में गूंजे झंकार, झुँझुने की धुन से
भरपूर, यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौरा।

At the bottom left is a 'वापस' (Back) button, in the center are three green dots indicating a scrollable section, and at the bottom right is an 'आगे' (Next) button.

2. Bold cases of first/second varna is preferred by ADHD users.

The screenshot shows a mobile application interface. At the top left is the SaralEd logo. In the top center, the text "Text Simplification Solutions" is displayed. At the top right is a user profile icon. Below the header, the title "बेहतर विकल्प चुनें" (Choose better options) is centered. The main content area contains two text boxes. The first text box, which has a red border, contains the following text:

कश्ती में गूंजे झांकार , झुँझुने की धुन से
भरपूर , यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौर।

The second text box contains:

कश्ती में गूंजे झांकार , झुँझुने की
धुन से भरपूर , यह व्याकरण
का अभ्यास , वर्णमाला का पूरा
दौर।

At the bottom left is a "वापस" (Back) button, at the bottom center are three dots indicating more content, and at the bottom right is an "आगे" (Next) button.

1. Normal Text is preferred by healthy users

Text Simplification Solutions

बेहतर विकल्प चुनें

कश्ती में गूंजे झाँकार , झुँझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर।

कश्ती में गूंजे झाँकार , झुँझुने की धुन से भरपूर , यह व्याकरण का अभ्यास, वर्णमाला का पूरा दौर।

वापस

आगे

2. Letter spacing for better readability for users with dyslexia.

Text Simplification Solutions

बेहतर विकल्प चुनें

कश्ती में गूंजे झांकार , झुँझुने की धुन से
भरपूर , यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौर।

कश्ती में गूंजे झांकार , झुँझुने की
धुन से भरपूर , यह व्याकरण का
अभ्यास, वर्णमाला का पूरा दौर।

वापस

आगे

1. Normal Text is preferred by healthy users.

The screenshot shows a mobile application interface. At the top left is the Sareefid logo, followed by the text "Text Simplification Solutions". At the top right is a user icon with the number "9". Below the header is a title box containing the text "बेहतर विकल्प चुनें". The main content area contains two text boxes. The first text box, outlined in blue, contains the following text:

कश्ती में गूंजे झाँकार , झुँझुने की धुन से
भरपूर , यह व्याकरण का अभ्यास,
वर्णमाला का पूरा दौर।

The second text box, outlined in red, contains the same text with specific letters colored in red:

क_रश्ती में गूंजे झाँकार , झुँझुने की
धुन से भरपूर , यह व्याकरण का
अभ्यास, वर्णमाला का पूरा दौर।

At the bottom left is a "वापस" button, at the bottom center are three dots, and at the bottom right is an "आगे" button.

2. Specific letter coloring for better readability for users with dyslexia.



The screenshot shows a mobile application interface for document upload. At the top left is the SaralEd logo. In the center, the text "Text Simplification Solutions" is displayed. At the top right is a user profile icon. A large central button contains the text "पाठ अपलोड करें". Below this button is a placeholder text "यहां टेक्स्ट पेस्ट करें ...". To the right of the placeholder is a document icon. At the bottom left is a "वापस" button with a red border, which is highlighted with a red box and a downward arrow pointing to a green box labeled "Back option". At the bottom right is an "आगे" button.

पाठ अपलोड करें

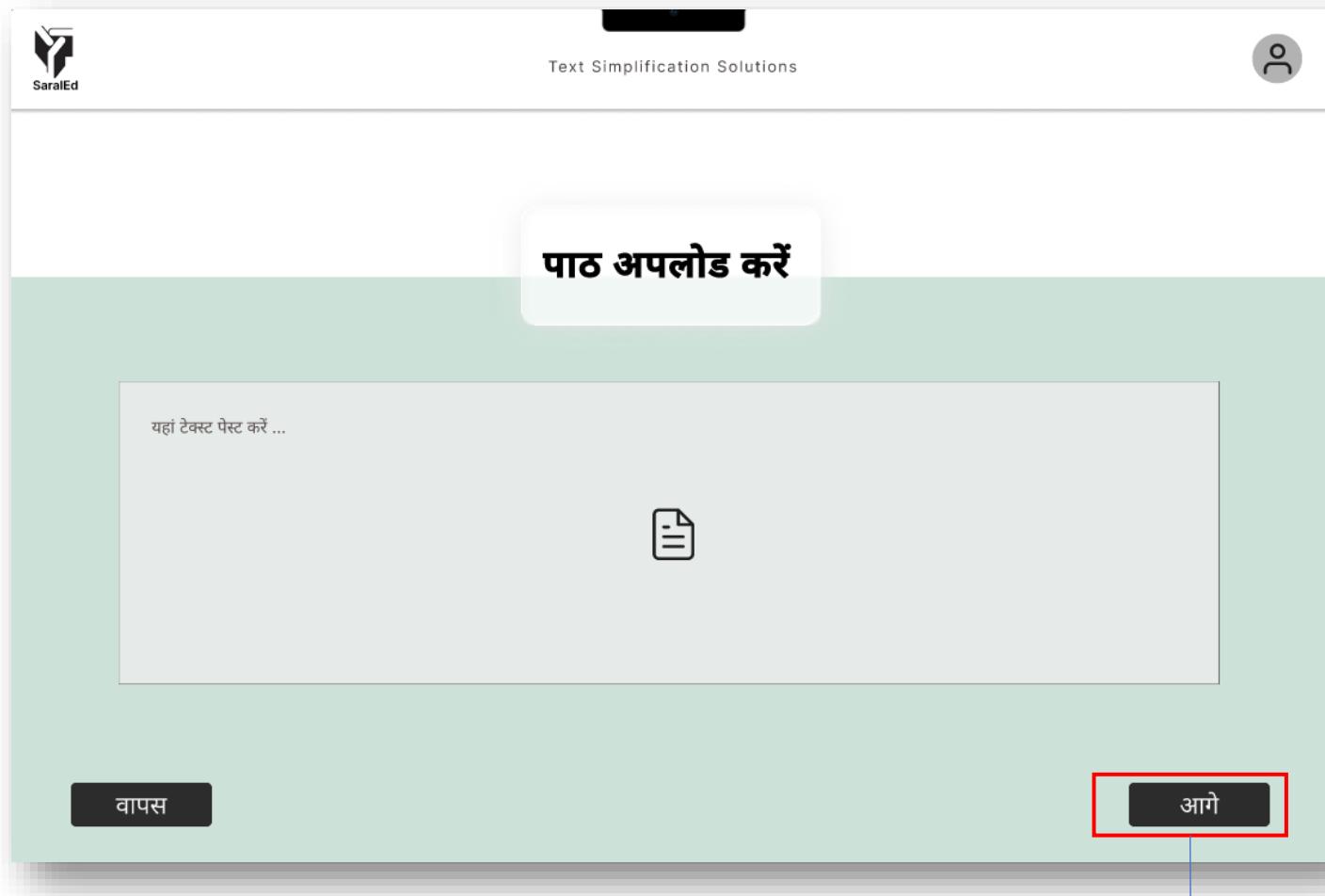
यहां टेक्स्ट पेस्ट करें ...

वापस

आगे

Back option

Users can go back to previous page by clicking this button



Continue option

Users can Continue
from here to the
next page

The screenshot shows a mobile application interface for text simplification. At the top left is the SaralEd logo, and at the top center is the text "Text Simplification Solutions". A circular icon with the number "2" is in the top right corner. In the center, there is a white button with the text "पाठ अपलोड करें". Below this is a large text input area with a red border containing the following text:
अपठित गद्यांश प्रश्नपत्र का वह अंश होता है जो पाठ्यक्रम में निर्धारित पुस्तकों से नहीं पूछा जाता है यह अंश साहित्यिक पुस्तकों पत्र-पत्रिकाओं या समाचार-पत्रों से लिया जाता है ऐसा गद्यांश भलौ ही निर्धारित पुस्तकों से हटकर लिया जाता है परंतु, उसका स्तर, विषय वस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही होती है प्रायः छात्रों को अपठित अंश कठिन लगता है और वे प्रश्नों का संही उत्तर नहीं दे पाते हैं इसका कारण अभ्यास की कमी है

At the bottom of the input area is a small button with an upward arrow icon and the text "पाठ अपलोड करें". Below the input area is a black button with the text "सरलीकरण करें". At the very bottom left is a black button with the text "वापस".

Input interface after
typing text

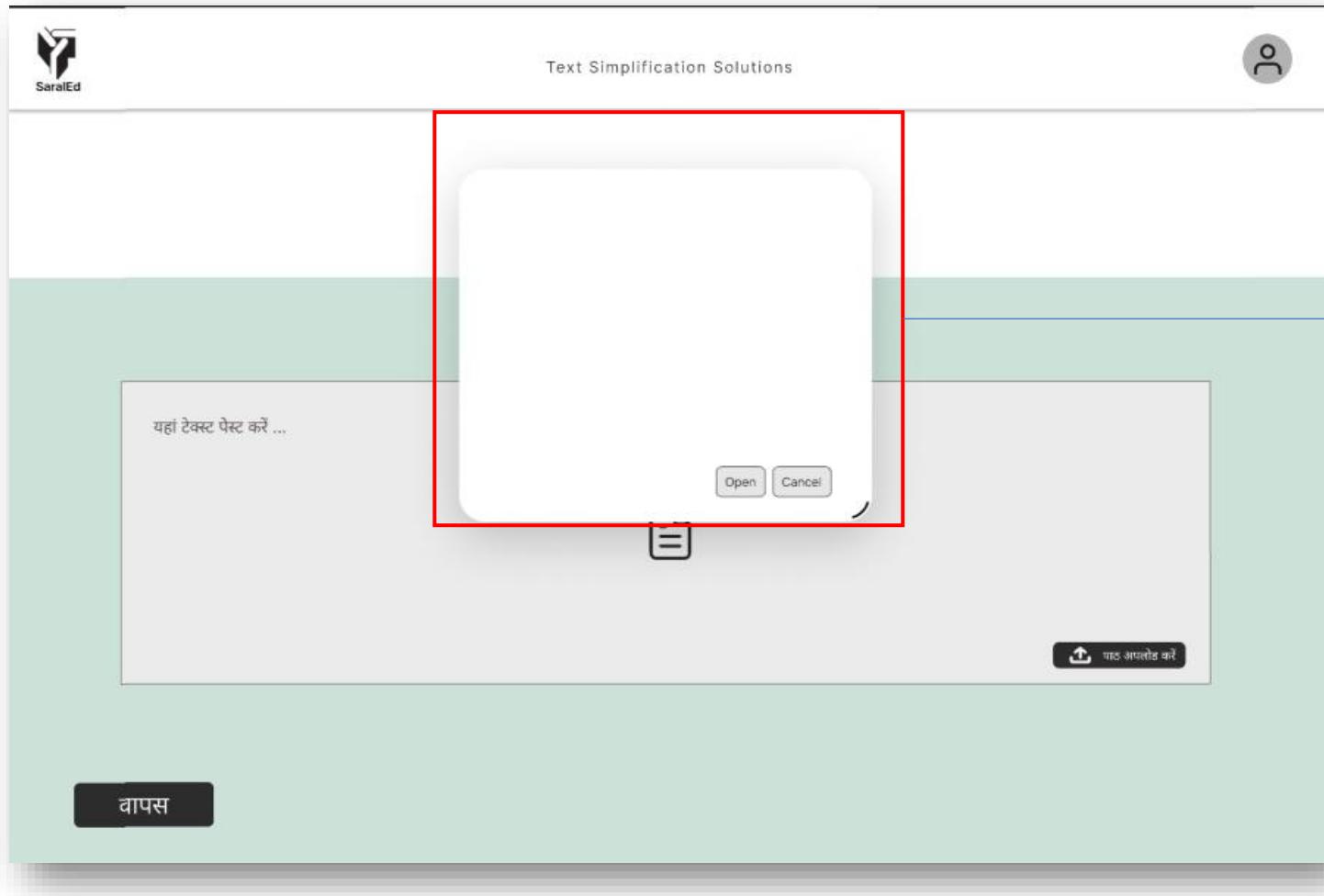


Upload option

Users can still upload a text file even after typing text.

The screenshot shows a mobile application interface for text simplification. At the top left is the SaralEd logo, followed by the text "Text Simplification Solutions". At the top right is a circular icon with a play symbol. In the center, a large button with a white border contains the text "पाठ अपलोड करें". Below this is a text area containing a paragraph about reading comprehension. At the bottom right of the text area is a small button with an upward arrow and the text "पाठ अपलोड करें". At the bottom left is a black button labeled "वापस". A red box highlights a button labeled "सरलीकरण करें" located below the "वापस" button. A blue arrow points from this highlighted button down to a green box containing the text "Summarize option".

Users can click this button to start summarizing their text.



Choose file options

User can choose files from the PC



Invalid input

When uploading file fails,
we see this dialogue box
pop up



आपके पाठ को सरल बनाया जा रहा है !

पाठ का
विश्लेषण

अर्थ को
अक्षुण्ण रखना

पाठ सारांश
उत्पन्न है

वापस

Processing the uploaded
text.

Users can see the
progression of processing
of their text.

The screenshot shows a web-based application for text simplification. At the top left is the SaralEd logo. The top center displays "Text Simplification Solutions". On the right side of the header is a user profile icon. Below the header, a green button reads "आपका सरलीकृत पाठ" (Your Simplified Text). To its right are language settings ("Hindi") and a "Sepia" color mode toggle. The main content area contains a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below this list are several interactive elements:

- A button labeled "जोर से पढ़ें" (Read Aloud) with a play icon.
- A button labeled "सारांश की लंबाई" (Summary Length) with a progress bar showing a ratio of approximately 1:3.
- A checkbox labeled "पढ़ने में सहायता" (Help during reading).
- Buttons for navigating through the text: "साइज़" (Size), "अंतर / दूरी : पंक्तियों" (Gap/Distance: Lines), "शब्दों" (Words), and "अक्षरों" (Letters).
- Buttons at the bottom: "अंत" (End) and "फिर से शुरू करें" (Start Again).

Summarized text

Text after summarization
will appear here.

The screenshot shows a web-based application for text simplification. At the top left is the SaralEd logo. The top center features the text "Text Simplification Solutions". On the right side of the header is a user profile icon and a "Sepia" color mode switch.

In the main content area, there's a green button labeled "आपका सरलीकृत पाठ" (Your Simplified Text). Below it is a list of bullet points:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the list is a section titled "सारांश की लंबाई" (Length of Summary) with a progress bar. A red box highlights this section. To the left of the progress bar are two radio buttons: one for "जोर से पढ़ें" (Read with emphasis) and another for "पढ़ने में सहायता" (Help while reading). Below the progress bar are four radio buttons for customization.

At the bottom, there are three sliders: "साइज़" (Size), "अंतर / दूरी : पंक्तियों" (Space between lines: Lines), "शब्दों" (Words), and "अक्षरों" (Letters). There are also two buttons: "अंत" (End) and "फिर से शुरू करें" (Start again).

No of words in summary

The length of the summarized text can be customized by the user.



आपका सरलीकृत पाठ

Hindi ▼Sepia

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है



जोर से पढ़ें



सारांश की लंबाई

. . . . |

 पढ़ने में सहायता

साइज़

अंतर / दूरी : पंक्तियों

शब्दों

अक्षरों

अंत

फिर से शुरू करें

Language option

Users can translate the summary into their desired language.



आपका सरलीकृत पाठ

Hindi

Sepia

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है



जोर से पढ़ें



सारांश की लंबाई

 पढ़ने में सहायता

साइज़



अंतर / दूरी :



पंक्तियों



शब्दों



अक्षरों



अंत

फिर से शुरू करें

Play option

Users can click this option to start playing audio.

The screenshot shows the SaralEd Text Simplification Solutions app interface. At the top, there is a logo for 'SaralEd' and the text 'Text Simplification Solutions'. Below this, there is a language selection dropdown set to 'Hindi' and a 'Sepia' mode toggle switch. A green button labeled 'आपका सरलीकृत पाठ' (Your Simplified Text) is visible. The main content area displays a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the list, there is a blue line pointing from the fourth bullet point to a red circle around the 'Stop' icon in the audio control bar. The audio control bar includes a play button (▶), a 'जोर से पढ़ें' (Read aloud) button, a 'Stop' icon (red circle with a white square), and a 'सारांश की लंबाई' (Summary length) slider. There are also checkboxes for 'पढ़ने में सहायता' (Help with reading) and 'साइज़' (Size). At the bottom, there are buttons for 'अंत' (End) and 'फिर से शुरू करें' (Start again).

Stop option

Users can click this option to stop the playing audio.

आपका सरलीकृत पाठ

Hindi

Sepia

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है



जोर से पढ़ें



सारांश की लंबाई

 पढ़ने में सहायता

साइज़

अंतर / दूरी : पंक्तियों

शब्दों

अक्षरों

अंत

फिर से शुरू करें

Help reading option

Users with focusing difficulty can enable this option to bold specific letters

The screenshot shows a web-based application for text simplification. At the top left is the SaralEd logo. In the center, it says "Text Simplification Solutions". On the right is a user icon. Below the header, a green button says "आपका सरलीकृत पाठ". To its right are language selection ("Hindi") and theme ("Sepia") buttons.

The main content area contains a list of bullet points:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the list are two buttons: "जोर से पढ़ें" (highlighted in black) and "पढ़ें". To the right is a progress bar labeled "सारांश की लंबाई" with a scale from 0 to 100. A checkbox "पढ़ने में सहायता" is followed by four radio buttons. At the bottom, there are four sliders: "साइज़" (size), "अंतर / दूरी : पंक्तियों" (space between lines), "शब्दों" (words), and "अक्षरों" (letters). A red circle highlights the "साइज़" slider. Buttons "अंत" (end) and "फिर से शुरू करें" (start again) are at the bottom right.

Text size option

Users can change the size of text



आपका सरलीकृत पाठ

Hindi

Sepia

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है



जोर से पढ़ें



सारांश की लंबाई

 पढ़ने में सहायता

साइज़

अंतर / दूरी : पंक्तियों

शब्दों

अक्षरों

अंत

फिर से शुरू करें

Post Summarization
Spacing option

Users can change the
spacing of the text

The screenshot shows a mobile application interface for text simplification. At the top, there is a logo for 'SaralEd' and the text 'Text Simplification Solutions'. A language switcher shows 'Hindi' and a 'Sepia' mode toggle. Below this, a green bar says 'आपका सरलीकृत पाठ' (Your Simplified Text). The main content area contains a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the text are three circular icons: a play icon, a bold text icon labeled 'जोर से पढ़ें', and a stop icon.

Further down, there is a section with radio buttons and a checkbox labeled 'पढ़ने में सहायता' (Help in reading). Below this is a horizontal slider with four segments: 'साइज़' (Size), 'अंतर / दूरी : पंक्तियों' (Space between lines: Lines), 'शब्दों' (Words), and 'अक्षरों' (Letters). The 'शब्दों' segment is highlighted with a red oval. A blue arrow points from this oval to a green button at the bottom labeled 'Word space option'. At the bottom right of the screen, there are two buttons: 'अंत' (End) and 'फिर से शुरू करें' (Start again).

Word space option

Users can change the spacing of words

The screenshot shows the SaralEd Text Simplification Solutions app interface. At the top, there is a logo for SaralEd, the text "Text Simplification Solutions", and a user profile icon. Below this, a green bar says "आपका सरलीकृत पाठ". To the right of this bar are language selection ("Hindi") and "Sepia" mode toggle buttons. The main content area displays a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the text are three circular icons: a play icon, a bold text icon labeled "जोर से पढ़ें", and a stop icon. A horizontal slider bar is present below the text, with the first two segments labeled "पढ़ने में सहायता". The third segment is labeled "अंतर / दूरी : पंक्तियों" and the fourth is labeled "शब्दों". The fifth segment, labeled "अक्षरों", is circled in red. At the bottom of the slider are two buttons: "अंत" and "फिर से शुरू करें". A blue arrow points from the "Font size" button at the bottom to the "अक्षरों" segment of the slider.

Font size

Users can change the font size.

The screenshot shows a web application interface for text simplification. At the top left is the SaralEd logo. The top center features the text "Text Simplification Solutions". On the right side are user profile icons and a "Sepia" color mode toggle. A green header bar at the top contains the text "आपका सरलीकृत पाठ". Below this, a language selection dropdown shows "Hindi" and a "Sepia" toggle switch. The main content area displays a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the text are three circular navigation icons: a play icon, a "जोर से पढ़ें" button, and a stop/circular arrow icon. A progress bar below shows four segments, with the first one having a checked checkbox labeled "पढ़ने में सहायता". At the bottom, there are four buttons: "साइज़", "अंतर / दूरी : पंक्तियों", "शब्दों", "अक्षरों", a red-bordered "अंत" button, and a "फिर से शुरू करें" button. A blue arrow points from the "अंत" button down to a green button labeled "End option".

Users can read and end the website, and this goes to the home page.

The screenshot shows a user interface for text simplification. At the top left is the SaralEd logo. In the center, it says "Text Simplification Solutions". On the right is a user profile icon. Below this, a green bar says "आपका सरलीकृत पाठ". To the right of the bar are language settings ("Hindi") and a "Sepia" color mode toggle. The main content area contains a list of bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the text are three circular icons: a play icon, a bold text icon labeled "जोर से पढ़ें", and a stop/cancel icon.

Further down, there's a section with a checkbox labeled "पढ़ने में सहायता" and four radio buttons below it. Below that is a progress bar with four segments: "साइज़", "अंतर / दूरी : पंक्तियों", "शब्दों", and "अक्षरों". Each segment has a blue vertical bar indicating progress. At the bottom are two buttons: "अंत" and "फिर से शुरू करें", with the latter being highlighted by a red border. A blue arrow points from this button down to a large green button labeled "Start again option".

Users can start the summarization process.

The screenshot shows a mobile application interface for text simplification. At the top left is the SaralEd logo. In the center, it says "Text Simplification Solutions". On the right is a user profile icon. Below the header, there's a green button labeled "आपका सरलीकृत पाठ" (Your Simplified Text). To its right is a language selection dropdown set to "Hindi". Further right is a toggle switch labeled "Sepia" with a red box and arrow highlighting it. Below these are three bullet points in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते

Below the text are three circular icons: a play icon, a bold text icon labeled "जोर से पढ़ें", and a square icon.

Underneath the text area is a horizontal bar with four circular icons. From left to right, they are: an unchecked checkbox labeled "पढ़ने में सहायता", three radio buttons, and two radio buttons.

At the bottom, there are four sliders with labels: "साइज़" (Size), "अंतर / दूरी : पंक्तियों" (Space/Distance: Lines), "शब्दों" (Words), and "अक्षरों" (Letters). Below these sliders are two buttons: "अंत" (End) and "फिर से शुरू करें" (Restart).

Background color option

This button enables background lighting.

Page-12

The screenshot shows the SaralEd app interface for text simplification. At the top, there is a logo and the text "Text Simplification Solutions". On the right side, there is a user profile icon and a "Sepia" toggle switch which is turned on. Below this, a green button says "आपका सरलीकृत पाठ". To the right of the button are language settings for "Hindi" and a dropdown menu. A yellow box contains the following bullet points:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the yellow box are two circular icons: one with a play symbol and another with a pause symbol, followed by the text "जोर से पढ़ें". To the right is a volume slider. Below the volume slider is a grey bar with a checkbox labeled "पढ़ने में सहायता" and four circular icons. At the bottom, there are four horizontal sliders with labels: "साइज़", "अंतर / दूरी : पंक्तियों", "शब्दों", and "अक्षरों". To the right of these sliders are two buttons: "अंत" and "फिर से शुरू करें".

Enabling this button introduces sepia background lighting. For better reading contrast.



आपका सरलीकृत पाठ

Hindi

Sepia

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

▶ जोर से पढ़ें □

100%

 पढ़ने में सहायता

साइज़ —————|———— अंतर / दूरी : पंक्तियों —————|———— शब्दों —————|———— अक्षरों —————|————

अंत

फिर से शुरू करें

Checking help in reading highlights specific words in the summarized text.

The screenshot shows a mobile application interface for text simplification. At the top, there is a logo for 'SaralEd' and the text 'Text Simplification Solutions'. Below this, a green header bar contains the text 'आपका सरलीकृत पाठ' (Your Simplified Text). To the right of the header are language selection buttons ('Hindi') and a 'Sepia' color mode toggle.

The main content area displays a summary of a story in Hindi:

- अपठित गद्यांश पाठ्यक्रम की पुस्तकों से अलग स्रोतों से लिया जाता है
- परंतु स्तर, विषयवस्तु और भाषा-शैली पाठ्यपुस्तकों जैसी ही रहती है
- छात्र इसे कठिन मानते हैं और सही उत्तर नहीं दे पाते
- मुख्य कारण अभ्यास की कमी है

Below the summary are several control buttons:

- ▶ (play), ○ (stop), ○ (repeat)
- A speed control slider with a red border, currently set to 100%.
- Checkboxes for 'पढ़ने में सहायता' (Assistance while reading) and other options.
- Sliders for 'साइज़' (Size), 'अंतर / दूरी : पंक्तियों' (Space between lines: Lines), 'शब्दों' (Words), and 'अक्षरों' (Letters).
- Buttons for 'अंत' (End) and 'फिर से शुरू करें' (Restart).

Speed control

Users can control the speed of speech by dragging the button.

Thank you

Prototype link : <https://www.figma.com/proto/Ja7BOl14pRfiJiSMqIkKwT/Untitled?node-id=4-3&p=f&t=vnUDmKq4i6FUqUPX-1&scaling=scale-down&content-scaling=fixed&page-id=0%3A1&starting-point-node-id=4%3A3>