1. Functional requirements

This section contains all the functional requirements of this project. They describe how the system should behave, so those requirements are essential and must be implemented in full.

1.1 Login Page

The user is able to log in with Google.

1.2 Settings Page

- The user is able to sign out from the app.
- The user is able to change personal information.

1.3 Resources Page

- The user is able to see and navigate between "Resources", "Add resource", "Settings" main pages.
- The system must display all added resources by a specific user on "Resources" page.

1.3.1 Add Resource page

- The user is able to add resources to the list of Resources.
- The 'Add Resource' page must contain a 'Title' mandatory field, a 'Notes' non-required field, and an 'Image' mandatory field.
- The system must allow uploading pictures in jpg, jpeg, png format only.

1.3.2 Single Resource Page

- The user can navigate to the 'Resource' page by clicking on a specific item on the 'Resources' page.
- The user is able to edit specific 'Resource'.
- The user is able to delete specific 'Resource'.
- The system must delete all related audio to resource if resource is deleted.
- The user is able to add a 'Media' by uploading a picture of the book page.
- The system must generate audio from text from added media by user.
- The system must display a list of added audios for specific resource.
- Single audio item must contain added date, first 100 characters of generated text, 'play' button with approx listening time.
- The user is able to play specific audio.

1.3.3 Single Media page

- The user can navigate to media page by clicking on a specific media item in 'Available audios' list on single resource page.
- The system must display resource title and generated text on specific media page.

- The user is able to open a source image.
- The user is able to delete specific media.

1.3.3 Audioplayer footer

- The user is able to pause and resume playing audio.
- The user is able to jump forward and back to 10 seconds of playing audio.

2. Use cases

- 1. User logs in successfully with their Google account.
- 2. User enters an incorrect email or password and receives an error message.
- 3. User clicks on the sign out button and is logged out of the app.
- 4. User clicks on the "Resources" button on the main menu and is taken to the Resources page.
- 5. User clicks on the "Add resource" button on the Resources page and is taken to the Add Resource page.
- 6. User enters a title for the resource in the "Title" field and adds an image in the "Image" field, but forgets to add any notes. They are prompted to add notes before they can submit the resource.
- 7. User uploads an image that is not in a supported format and receives an error message.
- 8. User adds a resource successfully and is taken back to the Resources page where they can see the new resource added to the list.
- 9. User clicks on a specific resource on the Resources page and is taken to the Single Resource page for that resource.
- 10. User edits the title of the resource and clicks the save button. The changes are saved and the user is taken back to the Single Resource page.
- 11. User deletes a resource by clicking the delete button on the Single Resource page.

 All related audio is deleted and the user is taken back to the Resources page.
- 12. User adds a media item to a resource and uploads an image of the book page. The system generates audio from the text and adds it to the list of available audio for that resource.
- 13. User clicks on a specific audio item on the Single Resource page and is taken to the Single Media page for that audio item.
- 14. User clicks on the source image on the Single Media page and is taken to the image viewer to view the image.
- 15. User deletes a specific media item on the Single Media page and is prompted to confirm the deletion before the item is removed from the list of available audio for that resource.
- 16. User clicks on the play button on a specific audio item on the Single Resource page and the audio begins playing.
- 17. User pauses the audio and then resumes it from where they left off.
- 18. User jumps forward 10 seconds in the audio playback and the audio resumes from that point.

- 19. User jumps back 10 seconds in the audio playback and the audio resumes from that point.
- 20. User clicks on the "Settings" button on the main menu and is taken to the Settings page.
- 21. User changes their password and clicks the save button. The password is updated and the user is notified that the changes have been saved.
- 22. User updates their email address and clicks the save button. The email address is updated and the user is notified that the changes have been saved.
- 23. User updates their profile picture and clicks the save button. The picture is updated and the user is notified that the changes have been saved.
- 24. User receives an error message when attempting to update their password with an incorrect old password.
- 25. User receives an error message when attempting to update their email address with an invalid email format.
- 26. User receives an error message when attempting to update their profile picture with a file that is too large.
- 27. User clicks on the "Home" button on the main menu and is taken back to the home page.
- 28. User clicks on the "Resources" button on the main menu and is taken to the Resources page where they can view a list of all their added resources.
- 29. User searches for a specific resource on the Resources page by typing the title in the search bar.
- 30. User sorts the list of resources on the Resources page by date added, title, or any other relevant criteria.
- 31. User is able to see their profile information on the Settings page.
- 32. User is able to edit their profile information on the Settings page.
- 33. System must require the user to confirm before deleting a resource or media.
- 34. User is able to search for a specific resource by its title on the Resources page.
- 35. System must display an error message if the user tries to add a resource without filling in the mandatory fields.
- 36. System must display an error message if the user tries to upload a picture in an unsupported format.
- 37. System must display an error message if the user tries to upload a picture that is too large.
- 38. User is able to filter the list of resources by date added or title on the Resources
- 39. User is able to see the total number of resources and media items on the Resources page.
- 40. User is able to navigate back to the Resources page from the Add Resource page.
- 41. User is able to cancel adding a resource and return to the Resources page.
- 42. User is able to cancel editing a resource and return to the Single Resource page.
- 43. User is able to see the date and time when a resource or media item was added or edited.
- 44. User is able to see a confirmation message after successfully adding a resource or media item.
- 45. User is able to see a confirmation message after successfully deleting a resource or media item.
- 46. System must display an error message if there is an error generating audio from text.

- 47. User is able to see a loading indicator while audio is being generated from text.
- 48. User is able to see the progress of audio generation while it is being generated.
- 49. System must display an error message if there is an error playing audio.
- 50. User is able to see a loading indicator while audio is being played.

3. UI requirements

3.1 Mockup

https://www.figma.com/file/abRxUPq9un1rCKxX9a6fWI/Heard-Prototypes?node-id=0%3A1&t=XphFWnlbA230Mp1h-0

3.2 Clickable Prototype

https://www.figma.com/proto/abRxUPq9un1rCKxX9a6fWI/Heard-Prototypes?node-id=2%3A121&scaling=min-zoom&page-id=0%3A1&starting-point-node-id=2%3A121