

10 Requirements

Idnum:1

Title: Create a book

Preconditions: The file system contains at least one audio file.

Postconditions: The book is visible when listing the created books.

Rationale: The user wants to group a collection of tracks.

Description: By clicking the “add new book” button in the bookshelf UI users are presented a file browser interface where all folders in the file system containing audio tracks are present in a file tree. The user can navigate into folders by clicking on them and move out of folders by clicking the top list element containing the text “to parent folder”. The user can then choose the tracks to create the book from by selecting individual tracks or folders by checking the checkboxes next to them. Clicking the “create new book” button finishes the selection and prompts the user to add a name to the newly formed book.

Relations: None

Idnum:2

Title: Play a book

Preconditions: At least one book exists.

Postconditions: The currently selected track is played.

Rationale: Users want to listen to previously created collections of audio tracks, such as complete audio books, in a user-friendly way.

Description: Users can choose to listen to specific collections of tracks by selecting books from the bookshelf UI by pressing on them in the list.

Relations: 1, 3

Idnum:3

Title: View books

Preconditions: None.

Postconditions: None.

Rationale: Users want an overview of all books contained in the bookshelf.

Description: The user enters the bookshelf interface (by either swiping right from the player interface while playing, or by pressing “back” in the browser interface) where all created books are displayed.

Relations: 1

Idnum:4

Title: Save and resume a listening session.

Preconditions: To resume a listening session, session data must exist.

Postconditions: The session data is written to a file when saving. The session data is loaded when resuming.

Rationale: The user will want to continue playback from another device or keep track of their listening progress.

Description: Upon pausing, selecting another book or closing the application, the system saves the current state of all the books contained in the user's bookshelf. When the application is restarted, the state of the books is equal to the state when saved.

If the user selects a book that contains existing session data, playback will resume from where it left off. If there is later data available on the cloud (which is notified to the user if they can access the cloud), the user will be able to download the session data and resume it as if it was locally stored.

Relations: 1, 2, (5: cloud storage), 6

Idnum:5

Title: Create an account

Preconditions: The user is connected to the cloud.

Postconditions: If the user manages to successfully create an account it is stored in the cloud.

Rationale: Storing accounts enables the users to store personal data safely on the cloud.

Description: The user creates an account by providing a user name and a password. If the user name already exists on the cloud the session is rejected and no data is written to the cloud, and the user may try again.

Relations: None

Idnum:6

Title: Jump to a given time

Preconditions: A track is started (in a paused or resumed state).

Postconditions: The elapsed time of the track is overwritten with the time given.

Rationale: The user may want to fast-forward or rewind.

Description: The user either 1.) presses on the seek bar to move to the given progress through the track or the book, or 2.) presses the seek buttons ("left" or "right") which seeks continuously as the button is pressed.

Relations: 1, 2

Idnum:7

Title: Edit the track order in a book

Preconditions: 1.) At least one book exists in the bookshelf, and 2.) at least two tracks exist in the book.

Postconditions: The tracks remain equivalent to their previous state. The book will change its "selected book index" if the currently selected track is moved, or if a track is moved to an index before the selected track in the list.

Rationale: The user wishes to change the order in which tracks are played in a book.

Description:

Relations: 1,3

Idnum: 8

Title: Control playback from widget

Preconditions: The user has the widget (on the home screen).

Postconditions: None

Rationale: Users will want to quickly access audio playback controls without having to switch to the application.

Description: The user uses the controls present in the widget (play/pause and next/previous track) to control playback of the currently playing book.

Relations: 2

Idnum:9

Title: Quit application

Preconditions: The application is in a resumed state.

Postconditions: If quit successfully (without interruption) the model tree is saved to a file, ensuring that playback may continue at a new instance of the application.

Rationale: The user will want to quit the application.

Description: The user chooses to quit the application. They can select the menu and press "Quit," which saves the model and terminates the application.

Relations: None

Idnum:10

Title: View statistics of a book

Preconditions: At least one book exists in the bookshelf.

Postconditions: The book(s) viewed remain equivalent to their previous state.

Rationale: The user may be interested in miscellaneous information about 1.) the book, or 2.) the listening session (how many times the book has been played, etc.).

Description: The statistics of a book are shown when the user "long-presses" the book (i.e. touches it for a long time).

Relations: 1, 3