
Faculty of Engineering, Alexandria University
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Software Engineering Milestone 3

Music Zone: An Online Virtual Music Listening Platform

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User Stories Covered in this Milestone

1. User signup
2. User login
3. Adding tag system to label music initially when uploaded by admins.
4. User functionalities:
 - a. Implement user interface that allows user to choose initial preferred tags.
 - b. Show music based on the music favorite tags.

Requirement Elicitation

Admin Add Tag To Track

1. Admin Should have the ability to create a new tag.
2. Each Tag have only a text field which should be unique from other tags.
3. Adding a new tag without its text or with a text similar to an already added text should result to an error message.
4. Adding a valid tag should to result to a success message.
5. Adding a new track or editing an existing one should be extended such that each track can have zero or more tags from those in the system.

User Login

1. Login page is accessed through the root url of the website in case user is not already logged in.
2. User logs in with valid email and password to enter the website.
3. If there is an invalid email or password an error message is shown.
4. In Case of a successful login, the admin is redirected to the main page.
5. In Case of failure in login, an error message is shown indicating invalid email or password.

User Sign Up

1. User can sign up by filling the following fields [First Name, Last Name, Email, Password].
2. All the previous fields are required and should be filled before submitting.
3. Password length should be greater than six characters.
4. If the user didn't fill any of the fields or filled them with invalid data [Invalid Email, Short Password, Email that is already taken], An error message should be shown with the error.
5. In case the user filled data correctly, he should be redirected to the choose favorite tags page.

User Choose initial preferred tags

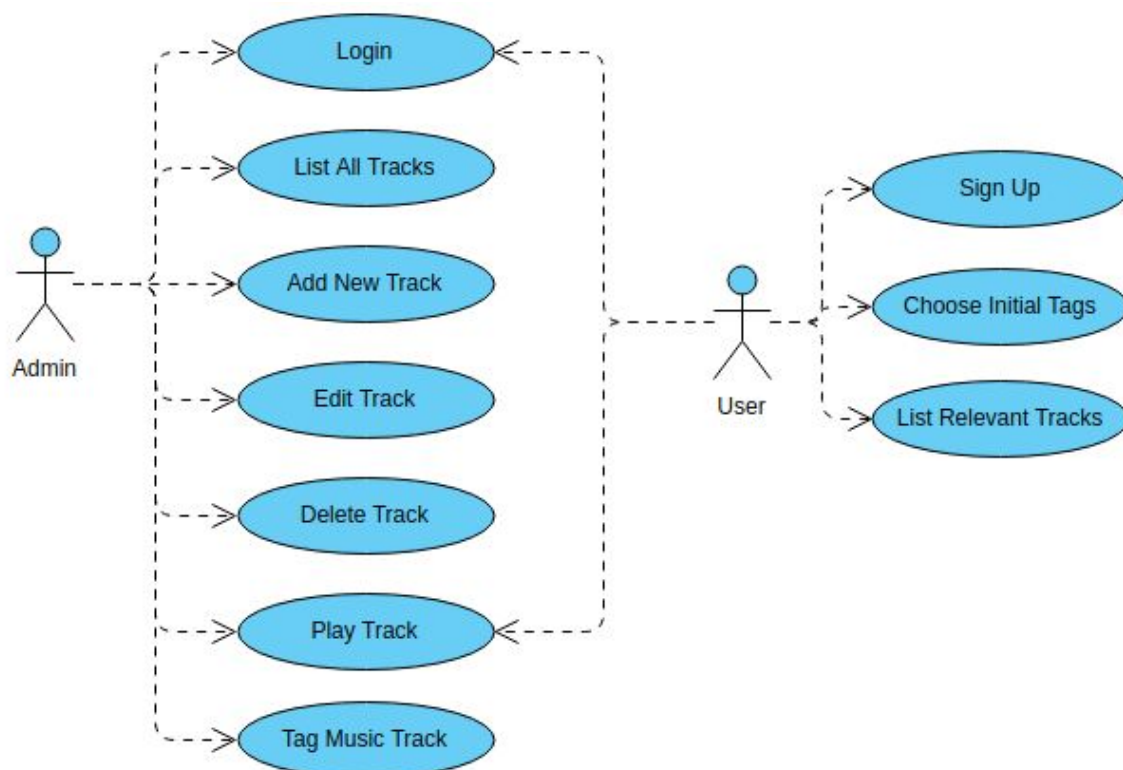
1. When user sign up for a new account he should be redirected to choose your favourite tags page.
2. The page should list all tags present in the system with none of them selected by default.

3. The user should have the ability to choose a tag by simply clicking on it.
4. The user should be able to select multiple tags.
5. In case user submits without choosing any tags he should stay in the same page to choose at least one tag.
6. In case user submits after choosing at least one tag he should be redirected to the site home page.

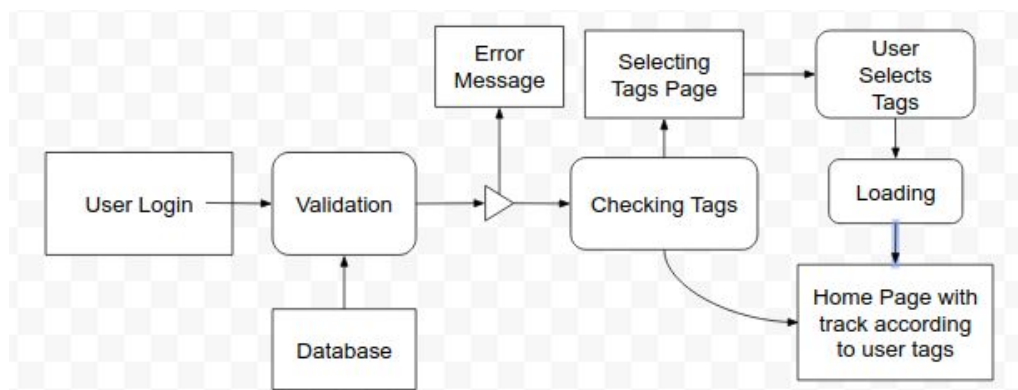
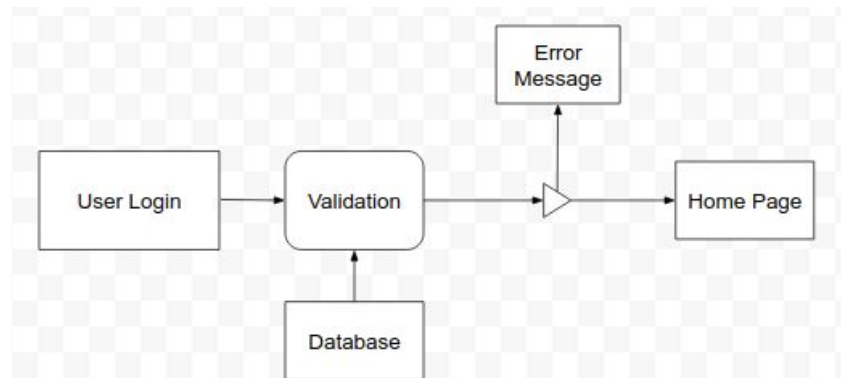
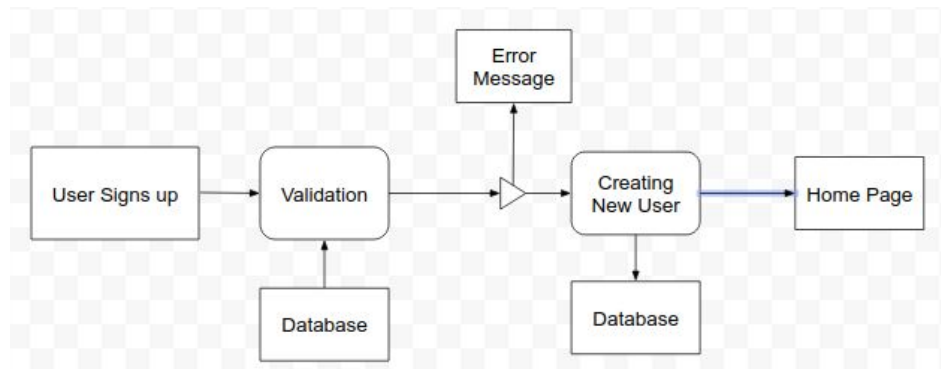
User See the list of his relevant tracks

1. When the user opens the home page, he should be able to see tracks that have the same tags that he has chosen as favorite tags before,
2. Each Track should have a play button that plays the track when it is clicked and then swaps to pause button to pause the track and so on.

Use Cases in this Milestone



Activity Diagrams of Use Cases in this Milestone



Test Cases

Task 1: User Login

Input:

- 1- A String representing the email address of the user.
- 2- A String representing the password of the user.

Tests:

- 1- Tests for input when user tries to login without providing email and without providing password.
- 2- Tests for input when user tries to login without providing email.
- 3- Tests for input when user tries to login without providing password.
- 4- Tests for input when user tries to login providing valid format email address but not registered in the database.
- 5- Tests for input when user tries to login providing valid format email address registered in the database and providing a non matching password.
- 6- Tests for input when user tries to login providing valid format email address registered in the database and providing its matching password.

Output:

Navigate to User Homepage in case of success or error message in case of failure.

Task 2: User Registration

Input:

- 1- A String representing the email address of the user.
- 2- A String representing the password of the user.
- 3- A String representing the first name of the user.
- 4- A String representing the last name of the user.

Tests:

- 1- Tests for input when user tries to register without providing any field.
- 2- Tests for input when user tries to register without providing email.
- 3- Tests for input when user tries to register without providing password.
- 4- Tests for input when user tries to register without providing first name.
- 5- Tests for input when user tries to register without providing last name.
- 6- Tests for input when user tries to register providing invalid format email address.
- 7- Tests for input when user tries to register providing valid format email address that is registered in the database.
- 8- Tests for input when user tries to register providing valid format email address unregistered in the database and providing other registered fields.
- 9- Tests for input when user tries to register providing valid format email address unregistered in the database and not providing a matching password and confirmation of password.

10- Tests for input when user tries to register providing a valid format email address not registered in the database and providing all other fields.

Output:

Navigate to User Homepage in case of success or error message in case of failure.

Task 3: User Choose initial preferred tags

Input:

- 1- Newly signed up user.
- 2- User chooses some initial tags and then clicks save changes.

Tests:

- 1- Tests that the right view is returned when signing up as a new user.
- 2- Tests that the select tags page doesn't open when user is not signed in.
- 3- Tests that user click save changes without choosing any tags.
- 4- Tests that user chooses some tags and then click save changes.

Output:

Redirect to the same page again in case no tags are selected and redirecting to the home page in case the some tags were chosen

Task 4: Show Tracks according to Tags

Input:

- 1- Click on Tags to be selected and submit

Tests:

- 1- Tests for list of tracks with selected tags.
- 2- Tests for all tracks when no selecting any tag.
- 3- Tests for empty list of tracks on selecting tag that is not available in any track.

Output:

Home page containing list of tracks for the selected tags.

Task 5: Play Tracks

Input:

- 1- Click on play button for each track.

Tests:

- 1- Tests for playing audio tracks.
- 2- Tests for showing timer for tracks.
- 3- Tests for play and pause.

Output:

Audio playing for each track.

Task 6: Show Tracks or Choose tags**Input:**

1- User account

Tests:

- 1- Tests for redirect to select favourite tags when user doesn't have any tags
- 2- Tests for showing tracks according to user when user has selected his favourite tags

Output:

Home page containing list of tracks for the selected tags or page for selecting favourite tags.