

Totem

Project Backlog

Team 20

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Problem Statement

Current polling platforms are not user-friendly or versatile. Moreover, most such platforms only exist as part of other social media platforms. We want to build a new style of a social media platform which enables easy polling between two images which can be uploaded by one person or as a challenge between two people based on a title/theme.

Background Information

In the past, we have all experienced a situation where we have wanted to make a personal decision, or host a simple competition between friends. While some social media platforms offer the ability to do this, they are often lackluster and do not offer robust features that we want. By designing a platform solely based on polling, we can allow users to quickly ask the questions they want and provide them with the options to make it straightforward, yet robust. These options will include the ability to create both public polls, available to be viewed by anyone on the platform, and private polls, which can only be viewed by those you have selected to be friends with. This feature is currently missing from other platforms, along with the ability to create polls on various forms of content, such as movies, music, or uploaded images.

Environment

The server will be a REST API built in Node/Express with a SQLite database. The server will be hosted on DigitalOcean. The frontend will be a React webapp.

We chose Node/Express and React so that the entire ecosystem will be in Javascript. They also aligned pretty well with the skillset of the group. We chose SQLite for the database because it won't be separated by a network, won't need many concurrent writers, and won't have too much data generated (at least for the duration of this course). A client/server database just wouldn't make sense for a project of this scale.

Functional Requirements

| Backlog Id | Functional Requirement | Hours | Status |
|------------|--|-------|----------------------|
| 1 | As a user, I would like to be presented with a splash page | 5 | Planned for Sprint 1 |
| 2 | As a user, I would like to see a brief description of the website on the splash page | 5 | Planned for Sprint 1 |
| 3 | As a user, I would like to be able to create an account on the sign-up page | 5 | Planned for Sprint 1 |
| 4 | As a user, I would like to login with an existing account on the login page | 5 | Planned for Sprint 1 |
| 5 | As a user, I would like to be able to change my password from the settings page | 5 | Planned for Sprint 1 |
| 6 | As a user, I would like to be able to change my display name from the settings page | 5 | Planned for Sprint 1 |
| 7 | As a user, I would like to be able to logout of my account from the settings page | 5 | Planned for Sprint 1 |
| 8 | As a user, I would like to be able to delete my account from the settings page | 5 | Planned for Sprint 1 |
| 9 | As a user, I would like to find friends via searching usernames | 5 | |
| 10 | As a user, I would like to send a friend request | 5 | |
| 11 | As a user, I would like to accept a friend request | 5 | |
| 12 | As a user, I would like to reject a friend request | 5 | |
| 13 | As a user, I would like to be able to view a list of my current friends | 5 | |
| 14 | As a user, I would like to remove friends | 5 | |
| 15 | As a user, I would like to see a list of all my polls | 5 | |
| 16 | As a user, I would like to see a all the polls I voted on | 5 | |

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| 17 | As a user, I would like to see the the number of polls I have won | 5 | |
| 18 | As a user, I would like to see the number of polls I have lost | 5 | |
| 19 | As a user, I would like to see my active polls | 5 | |
| 20 | As a user, I would like to see my inactive polls | 5 | |
| 21 | As a user, I would like to share my wins and losses on facebook | 5 | |
| 22 | As a user, I would like to share my wins and losses on twitter | 5 | |
| 23 | As a user, I would like to share my wins and losses on instagram | 5 | |
| 24 | As a user, I would like to create a friend poll | 5 | |
| 25 | As a user, I would like to send an invite to a friend for a friend poll. | 5 | |
| 26 | As a user, I would like to create a personal poll | 5 | Planned for Sprint 1 |
| 27 | As a user, I would like to be able to upload image(s) into the poll | 5 | |
| 28 | As a user, I would like to be able to select image options for the poll through other means, such as movie posters, album artwork, and GIFs | 5 | |
| 29 | As a user, I would like to view the image before I upload it | 5 | Planned for Sprint 1 |
| 30 | As a user, I would like to be able to set the title of the poll | 5 | Planned for Sprint 1 |
| 31 | As a user, I would like to be able to add a theme to a poll | 5 | Planned for Sprint 1 |
| 32 | As a user, I would like to be able to set the privacy of the poll | 5 | Planned for Sprint 1 |

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| 33 | As a user, I would like to be able to set a time limit or expiration for my poll | 5 | Planned for Sprint 1 |
| 34 | As a user, I would like to start the poll once the invited friend has uploaded their image | 5 | |
| 35 | As a user, I would like to accept a friend poll | 5 | |
| 36 | As a user, I would like to reject a friend poll | 5 | |
| 37 | As a user, I would like to upload a photo to a friend poll | 5 | |
| 38 | As a user, I would like to approve the poll to be launched | 5 | |
| 39 | As a user, I would like to accept a friend poll | 5 | |
| 40 | As a user, I would like to reject a friend poll | 5 | |
| 41 | As a user, I would like to upload a photo to a friend poll | 5 | |
| 42 | As a user, I would like to approve the poll to be launched | 5 | |
| 43 | As a user, I would like to see public polls on the public page | 5 | |
| 44 | As a user, I would like to see private polls from my friends on the my private page | 5 | |
| 45 | As a user, I would like to sort polls by expiration date on both public and private pages | 5 | |
| 46 | As a user, I would like to sort polls from oldest to newest and newest to oldest on both public and private pages | 5 | |
| 47 | As a user, I would like to filter polls based on ones I have and have not voted on both public and private pages | 5 | |
| 48 | As a user, I would like to filter polls by themes on both public and private pages | 5 | |

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| 49 | As a user, I would like to vote for an option on a poll | 5 | Planned for Sprint 1 |
| 50 | As a user, I would like to see the current results of the poll after a vote is submitted | 5 | Planned for Sprint 1 |
| 51 | As a user, I would like to see notifications of my complete polls | 5 | Planned for Sprint 1 |
| 52 | As a user, I would like to access the public, private and personal pages from the navigation bar | 5 | Planned for Sprint 1 |
| 53 | As a user, I would like to navigate to the tournament page | 5 | |
| 54 | As a user, I would like to create a tournament | 5 | |
| 55 | As a user, I would like to set a theme and title for my tournament | 5 | |
| 56 | As a user, I would like to start my tournament | 5 | |
| 57 | As a user, I would like to select a tournament to join | 5 | |
| 58 | As a user, I would like to upload or select a image to be used during the tournament | 5 | |
| 59 | As a user, I would like to see the my competitors in the waitroom prior to the start of the tournament | 5 | |
| 60 | As a user, I would like to see a list of active tournaments | 5 | |
| 61 | As a user, I would like to see the progress and current state of a selected active tournament | 5 | |
| 62 | As a user, I would like to vote in each bracket | 5 | |
| 63 | As a user, I would like to see the score of the poll, after i have voted | 5 | |
| 64 | As a user, I would like to see the winning image at the end of each round. | 5 | |

Non-Functional Requirements

Security:

In order to optimize security we will start by implementing the basics, such as password hashing and email verification. We will also allow for a private poll option to be seen only by people who are friends with either of the people involved in the poll. This will be completely separate from the public polling page where anyone can see it, and allow for more private options for more personal polls.

Scalability:

When creating the web application, we are going to program it in order to allow for scaling the product up. Since we have a user functionality, we are creating a unique username requirement to make sure each user is individually represented. From there every user has their own data and connections. Implementing in this way allows for the web application to be scaled up by only increasing the space allocated to the database.

Usability:

In order to maximize the usability of our web application, we are going to optimize the user interface in order to make it easy to navigate and get started. We will create the user interface to work well on both mobile and desktop sites. We are going to have multiple pages, each representing a different functionality of the web application. These pages will include a homepage, this is a splash page where the user will decide to sign up or login. The user will then be redirected to the appropriate page based on what route they chose. After they are logged in, they will see the public page but will be able to easily navigate to other pages to see their profile, search for friends, view private polls, etcetera. This paging will allow people to find whatever they are looking for very easily to optimize the efficiency of our web application.

Hosting:

Since we are developing a web application it is going to need to be deployed. We are going to host it on a virtual machine(i.e digital ocean). As for a database, we are using SQLite, which is a self-contained SQL database engine, meaning the data is stored locally and not a client/server based database. This will allow for easy and quick storage, and giving us as developers more control over database entries.

Use Cases

Case: Create Account

| Action | System Response |
|--------------------------------|-------------------------------------|
| 1. Click create account button | 2. Navigates to create account page |
| 3. Enter required input | |
| 4. Click submit | 5. Validate required input |
| | 6. Send signup POST http request |
| | 7. Navigate to public feed page |

Case: Login

| Action | System Response |
|--------------------------------|-----------------------------------|
| 1. Click login button | 2. Navigate to login page |
| 3. Enter username and password | |
| 4. Click enter | 5. Validate username and password |
| | 6. Send login POST http request |
| | 7. Navigate to public feed page |

Case: Change Password

| Action | System Response |
|--|--|
| 1. Navigate to settings page | |
| 2. Click change password | |
| 3. Enter old password and new password | |
| 4. Click submit | 5. Validate required input |
| | 6. Send password change PUT http request |

Case: Change Display Name

| Action | System Response |
|------------------------------|--|
| 1. Navigate to settings page | |
| 2. Click change Display Name | |
| 3. Enter new display name | |
| 4. Click submit | 5. Validate required input |
| | 6. Send display name change PUT http request |

Case: Logout

| Action | System Response |
|------------------------|-------------------------------------|
| 1. Click logout button | 2. Delete session key from frontend |
| | 3. navigate to splash page |

Case: Delete Account

| Action | System Response |
|------------------------------|--|
| 1. Navigate to settings page | |
| 2. Click delete account | |
| 3. Enter current password | |
| 4. Click submit | 5. Validate required input |
| | 6. Send delete account DELETE http request |

Case: Add Friend

| Action | System Response |
|------------------------|------------------------------------|
| 1. Navigate to profile | |
| 2. Click friends | |
| 3. Click add friends | |
| 4. Search for username | 5. Send get users GET http request |
| 6. Select user | |

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|-----------------------|--------------------------------------|
| 7. Click send request | 8. Send add friend POST http request |
|-----------------------|--------------------------------------|

Case: Remove Friend

| Action | System Response |
|------------------------|---|
| 1. Navigate to profile | |
| 2. Click friends | 3. Send get friends GET http request |
| 4. Click the friend | |
| 5. Click remove friend | 6. Send remove friend DELETE http request |

Case: View Friends

| Action | System Response |
|------------------------|----------------------------------|
| 1. Navigate to profile | |
| 2. Click friends | 3. Send friends GET http request |

Case: View Personal Page

| Action | System Response |
|----------------------------|---|
| 1. Click personal page tab | 2. Navigate to personal page |
| 3. Click view stats | 4. Send get stats GET http request |
| 5. Click View polls | 6. Send get personal polls GET http request |

Case: View Public Polls Page

| Action | System Response |
|--------------------------|---|
| 1. Click Public page tab | 2. Navigate to Public polls page |
| | 3. Send get public polls GET http request |

Case: View Private Polls Page

| Action | System Response |
|---------------------------|--|
| 1. Click private page tab | 2. Navigates to private polls page |
| | 3. Send get private polls GET http request |

Case: Create Personal Poll

| Action | System Response |
|---------------------------------------|--|
| 1. Click create poll button | 2. Navigate to create poll page |
| 3. Enter required poll creation input | |
| 4. Upload both poll picture option | 5. Image selector (file upload, external API, etc) pops up for use |
| 6. Click submit poll | 7. Validate required input |
| | 8. Send create poll POST http request |

Case: Create Friend Poll

| Action | System Response |
|--|---------------------------------------|
| 1. Click create poll button | 2. Navigate to create poll page |
| 3. Enter required poll creation input | |
| 4. Upload single poll option | |
| 5. Select friend to send poll request to | 6. Send get friends GET http request |
| 7. Click send poll invite | 8. Validate required input |
| | 9. Send create poll POST http request |

Case: Accept Friend Poll

| Action | System Response |
|-----------------------------|--|
| 1. Click view poll requests | 2. Navigate to poll requests page |
| 3. Select poll request | 4. Navigate to poll creation page |
| 5. Upload image to poll | 6. Image selector (file upload, external API, etc) pops up for use |
| 7. Click submit option | 8. Send poll update PUT http request |

Case: Launch Poll

| Action | System Response |
|-----------------------------|-----------------------------------|
| 1. Click view poll requests | 2. Navigate to poll requests page |

| | |
|-----------------------------|--|
| 3. Select completed request | 4. Navigate to poll creation page |
| 5. Click launch poll | 6. Validate required input |
| | 7. Send poll creation PUT http request |

Case: Sort Polls

| Action | System Response |
|--------------------------|---|
| 1. Click sort button | 2. Show sort options |
| 3. Select sorting option | 4. Send get sorted polls GET http request |

Case: Filter Polls

| Action | System Response |
|---------------------------|---|
| 1. Click filter button | 2. Show filter options |
| 3. Select a filter option | 4. Send get filtered polls GET http request |

Case: Vote on Poll

| Action | System Response |
|--|--|
| 1. View poll | |
| 2. Select one option of poll and click | 3. Send poll PUT http request |
| | 4. Send get poll results GET http requests |

Case: Notifications

| Action | System Response |
|----------------------|---------------------------|
| 1. Poll ends | |
| 2. Notification sent | |
| | 3. Notification displayed |

Case: Navigation

| Action | System Response |
|------------------------|-------------------------------------|
| 1. Click a page option | 2. Navigate to option selected page |