

Product Backlog

Team 8

Team Members: David Carr, Shivan Desai, Reid Kippenbrock, Laura Kristie, Paul Krivacka

Problem Statement

HE>LO WORLD is a dating app focused on matching computer science students and professionals based on all the normal dating app preferences, but also including the coding preferences of the users.

Background Information

It's a lonely world, especially for those of us stuck in our dorm rooms bug fixing and testing all day long. If only there was a website tailored specifically to pairing Computer Scientists to their perfect companions. Our goal with our project is to make a dating web application for computer scientists. Other popular web applications tend to use only common interests in order to match users. For our application, we'll be using this information as well with an extra twist: Students will also be matched based on their coding preferences!

Environment

We will be using React and Bootstrap for our front end development framework. We will utilize Node.JS and Firebase to manage the backend. Firebase will also be used as our primary database for storing user data. Our React App will be written in the JSX programming language, which at its core is Javascript. Our Node.JS backend will also be written in Javascript. Source control will be handled through a GitHub repository.

Functional Requirements

Backlog Id	Functional Requirements	Hours	Status
1	As a user I would like to create a HE>LO WORLD account.	4 hours	Planned for Sprint 1
2	As a user I would like to login and logout of my HE>LO WORLD account.	4 hours	Planned for Sprint 1
3	As a user, I would like to fill out a personality questionnaire.	10 hours	Planned for Sprint 1

4	As a user, I would like to fill out a fun coding questionnaire.	8 hours	Planned for Sprint 1
5	As a user, I would like to be able to edit my questionnaire answers.	10 hours	
6	As a user, I would like to be able to upload pictures of myself and my interests to show on my profile.	8 hours	
7	As a user, I would like to be able to set/change my name, profile description, and preferences on my account.	6 hours	Planned for Sprint 1
8	As a user, I would like to be matched with people who have similar personalities to my own.	10 hours	Planned for Sprint 1
9	As a user, I would like to view my potential matches and our match compatibility score.	10 hours	Planned for Sprint 1
10	As a user, I would like to “like” other accounts to display my interest in getting to know them.	8 hours	
11	As a user, I would like to be able to chat with users I’ve been matched with.	12 hours	
12	As a user, I would like to view a list of others who have been matched with me.	8 hours	
13	As a user, I would like to receive notifications for when I receive a new chat message.	8 hours	
14	As a user, I would like to be able to “unlike” someone if they are not right for me.	6 hours	
15	As a user, I would like to be able to report other users.	4 hours	
16	As a developer, I would like to be able to verify if a user is logged in on all required pages.	8 hours	Planned for Sprint 1
17	As a user, I would like to be able to easily navigate between web pages.	5 hours	Planned for Sprint 1
18	As a user, I would like a secure login page (HTTPS).	8 hours	
19	As a user, I would like a Matching webpage where I can view potential matches.	6 hours	Planned for Sprint 1

20	As a user, I would like a Matches webpage where I can view people I have been matched with.	6 hours	
21	As a user, I would like to have homepage that explains what HE>LO WORLD is.	5 hours	Planned for Sprint 1
22	As a user, I would like to be able to see the online status of my matched users.	8 hours	
23	As a user, I would like to select a picture as my profile picture to display on the matching page. .	6 hours	

Non-Functional Requirements

Backlog ID	Non-Functional Requirements
1	As a developer, I would like multiple users to use HE>LO WORLD at the same time.
2	As a user, I would like a clean, easy-to-use web interface.
3	As a user, I would like to have a secure login process.
4	As a user, I would like to have my account information to be kept private.
5	As a user, I would like to HE>LO WORLD to work on all browsers.
6	As a user, I would like to have my chat messages to be kept private.
7	As a developer, I would like to have an api that can communicate between my server and client

Use Cases

Case: User wants to create an account (ID 1)

ACTION	SYSTEM RESPONSE
1. User navigates to create account page.	2. User is given an account creation page.
3. User fills out page with a selected username and password.	4. Make sure username and password is valid, then respond with either successfully created account or error. This will also redirect to the login page.

5. User fixes error with username or password, or can login with their account.	
---	--

Case: User would like to login/logout of H&LO WORLD. (ID 2)

ACTION	SYSTEM RESPONSE
1. User clicks the “login/logout” button on the upper right side of any of the web pages depending on whether they are logged in or not.	2. If User is logged in, User is logged out and redirected to login page. Else, go to 3.
	3. If User is not logged in, User is redirected to login page.
4. User enters username and password and clicks login.	5. Check for correct login information and either redirect to home page logged in or present error.

Case: User would like to fill out the personality questionnaire. (ID 3)

ACTION	SYSTEM RESPONSE
User Creates Account	Display the Personality Questionnaire Web Form
User Edits Questionnaire answers and clicks ‘Submit’	Save the User’s changes to the database

Case: User would like to fill out the Coding questionnaire. (ID 4)

ACTION	SYSTEM RESPONSE
User Creates Account, then finishes Personality Questionnaire	Display the Coding Questionnaire Web Form
User Edits Questionnaire answers and clicks ‘Submit’	Save the User’s changes to the database

Case: User would like to edit the questionnaire answers. (ID 5)

ACTION	SYSTEM RESPONSE
User clicks ‘Edit Questionnaire answers button on their Profile page’	Display the Personality Questionnaire Web Form
User Edits Questionnaire answers and clicks ‘Submit’	Save the User’s changes to the database, Display the Coding Questionnaire Web Form

User Edits Questionnaire answers and clicks 'Submit'	Save the User's changes to the database
--	---

Case: User wants to upload an image. (ID 6)

ACTION	SYSTEM RESPONSE
1. User clicks the 'Upload Picture(s)' button their profile page.	2. A upload file window appears allowing the user to choose and upload a picture from their computer.
2. User selects Image(s) that they want to upload	
3. User clicks the 'upload' button.	4. The window closes and the uploaded images are added to the user's profile

Case: User wants to update/input account information. (ID 7)

ACTION	SYSTEM RESPONSE
1. User navigates to settings page.	2. Settings page is displayed to the user.
3. User changes relevant information (name, profile description, sexual orientation, etc.) and clicks the 'Save' button.	4. Update the user's data and return a success message.
5. User navigates to questionnaire response page	6. Display the User's answers to the questionnaire and give option to change answers.
7. User changes answers and clicks save.	8. User information is changed in database.

Case: User is matched with other users (ID 8)

ACTION	SYSTEM RESPONSE
1. User finishes both questionnaires.	2. User is added to user pool for matches.
3. User requests a list of matches.	4. Compare User's questionnaire data to other Users and send a list of compatible users. The server randomly selects 100 accounts and selects the top ten matching scores, or the top ten from all the accounts if less than 100. The matching score is computed by assigning a matching multiplier to each question on both of the questionnaires and then subtracting points for each differing answer The top matching scores are added to the potential matches list for the user and that user is added to the potential matches list for the

	potential matches i.e. if user1 is added as a potential match for user2, user2 is also added a potential match for user1.
5. User views list of compatible users and chooses whether they want to “like” any of the other users	6. If two users both ‘like’ each other, then communication details as specified by the user will become visible to both of the matched Users.
7. User continues to look at other users on the compatible list.	

Case: User wants to view potential matches (ID 9)

ACTION	SYSTEM RESPONSE
1. User navigates to potential matches page.	2. If user has potential matches already in database, show potential matches, else display a request matches button.
3. User requests more potential matches.	4. More potential matches are generated for the user.

Case: User wants to ‘like’ another user (ID 10)

ACTION	SYSTEM RESPONSE
1. User selects a User profile on the potential matches page and presses the ‘like’ button	2. The ‘liked’ user is added to the current user’s list of matched users and removed from the list of potential matches

Case: User wants to ‘dislike’ another user (ID 10)

ACTION	SYSTEM RESPONSE
1. User selects a User profile on the potential matches page and presses the ‘dislike’ button	2. The ‘disliked’ user is removed from the list of potential matches

Case: User wants to send a message to one of their matches. (ID 11)

ACTION	SYSTEM RESPONSE
1. User navigates to their matches page.	2. The matches page is displayed to the user.
3. User chooses one of their matches and clicks the ‘chat’ button.	4. The chat dialog box appears to the user.
5. User types a message in the text box, The	6. The dialog box appears and displays

user clicks the 'send' button.	"Message Sent". The message is sent to the matched user. The message is displayed in the matched user's chat.
--------------------------------	---

OR

ACTION	SYSTEM RESPONSE
1. User navigates to their chat page.	2. Chat page is displayed to the user.
3. User chooses one of their matches to chat with and clicks their name.	4. The chat for that user appears on the right-side of the screen next to the list.
5. User types a message in the text box. The user clicks the 'send' button.	6. The message appears in the chat. The text box is cleared. The message is sent to the matched user. The message is displayed in the matched user's chat.

Case: User wants to view their matches. (ID 12)

ACTION	SYSTEM RESPONSE
1. User navigates to the matches page.	2. The mutually matched page is displayed to the user. The user sees a list of their mutual matches and their compatibility score for each match, with the option to chat with them.

Case: User receives notification for a chat message. (ID 13)

ACTION	SYSTEM RESPONSE
1. User1 navigates to the chat page.	2. The Chat page appears for User1
3. User1 clicks the User2 on the chat list	4. A chat appears for User1 and User2.
5. User1 types a message in the text box. User1 clicks the "send" button.	6. The message is sent to User2. The message is displayed in the chat for User1 and User2. Notification are sent and displayed to User2.
7. User2 see a notification on the nav bar for the chat page. User2 navigates to the chat page.	8. The chat page is displayed to the user. A notification appears on the Userlist next to User1 for User2 to see.

Case: User wants to 'unlike' another user AND User wants to remove communications with other users (ID 14)

ACTION	SYSTEM RESPONSE
2. User selects a User profile on the matches page and presses the 'unlike' button	2. The 'unliked' user is removed from the list of matched users and communications are hidden between both users

Case: User would like to be able to report other users on H&LO WORLD. (ID 15)

ACTION	SYSTEM RESPONSE
1. User is looking for potential matches and loads a profile.	2. Check if user is logged in, if not, show login prompt. Else, load the users profile in the matching view.
3. User clicks the 'Report' button, selects the appropriate options, and clicks submit.	4. Check to ensure that the report was valid, and email it to one of the developers/moderators. Then automatically 'unlike' the person for the user and display a success.

Case: User would like view webpage what contains information personal to a user (ID 16)

ACTION	SYSTEM RESPONSE
1. User navigates to a webpage that requires user validation (matches, matching, profile, etc.)	2. Check if session id is valid, if it is, return webpage like normal, else, force logout the user and redirect to homepage

Case: User logs in securely over HTTPS. (ID 18)

ACTION	SYSTEM RESPONSE
1. User fills out information correctly on the login page and clicks login. Data is sent to server over https.	2. User is logged in and redirected to home page.

Case: User would like to navigate to the Matching page. (ID 17, 19)

ACTION	SYSTEM RESPONSE
1. User enters URL/clicks link to the Matching page	2. Check if user is logged in, if not, show login prompt. Else, return matching page

Case: User would like to navigate to the Matches page. (ID 17, 20)

ACTION	SYSTEM RESPONSE
1. User enters URL/clicks link to the Matching page	2. Check if user is logged in, if not, show login prompt. Else, return matches page

Case: User would like to navigate to the Home page OR User wants to know what Hello World is. (ID 17, 21)

ACTION	SYSTEM RESPONSE
1. User enters URL/clicks link to the Home Page	2. Returns home page

Case: User would like to see which of his matches are online/away/offline. (ID 22)

ACTION	SYSTEM RESPONSE
1. User navigates to matches or chat page.	2. Return the matches or chat page.
3. User looks at icon next to users with green meaning online, yellow meaning away, and red meaning offline.	

Case: User wants to upload an image. (ID 23)

ACTION	SYSTEM RESPONSE
1. User selects an image from their album and clicks 'Set as Profile Picture'	2. The selected image is set to be the default image for the profile.