Team 41

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Famigo Sprint 1 Planning Document

Reviews You Can Trust

Scrum Master: Shaun Keene Sprint Overview

For our first sprint, we want to lay the groundwork for our application. Since most of our application plans to build off of itself, we would like to make sure the core components are functional. Our end result should make it so our later work can be implemented without much fanfare. In the end, a user should be able to access the site and perform very basic tasks that include signing in, making reviews, and viewing their personal page/data.

Meeting Plan: Tuesday/Thursday at 7:30PM, Saturday at 3:00PM

Risks and Challenges

The first sprint is very important for the overall health of our application. If our starter code is implemented poorly, then the entire project could be at risk of failure. Failing to properly test, document, and standardize our code could make coding very confusing in the future. Additionally, we need to make sure that our project stays within scope. It is very easy to start adding miscellaneous features that throw off the entire production schedule. Since we are focusing on quality over quantity for the first sprint, we need to diligently ensure that the work we are doing stays cohesive and comprehensible.

Current Sprint Detail

User Story #1
As a user, I would like to be able to create an account so that I can save my information

#	Description	Estimated Time	Owner
1	Create SQL server	4 hrs	Nitin
2	Create the SQL schema	2 hrs	Nitin
3	Integrate the database with Spring Boot	2 hrs	Nitin
4	Create User class and data storage structure	3 hrs	Shaun
5	Make account creation page including password entry and re-entry and star out letters	2 hrs	Zack
6	Make password entry visible	1 hr	Zack
7	Check username and email for redundancy and that password meets requirements	2 hrs	Zack
8	Generate unique email verification link and store in database	1 hr	Joey
9	Create verification confirmation page and send email	3 hr	Joey
10	Make verification link expire after set period of time	2 hr	Joey
11	Make verification link expire if a new one is sent	2 hr	Joey
12	Create login system and page	2 hrs	Zack
13	Create/Design User page UI (template, add functionality later)	3 hrs	Zack
14	Test login system with unit tests	3 hrs	Zack

- Given functional synchronization, multiple users should be able to use the app simultaneously
- given that a user enters a different password in the verify field, they will get an error indicating so
- given that a user enters a password that does not meet the minimum requirements; they will get an error indicating the requirements
- Given correct implementation of the create account feature, when the user attempts to create an account they should be redirected to a "Create Account" Screen
- Given correct account creation, when a user creates a new account, there will be an error if the email is already in use
- Given a user enters their correct email, a verification link will be sent to the email
- Given a user enters the verification link, when the user verifies the email then the account will be created successfully.
- Given a user does not verify their email via the verification link under a set period of time, then the link will expire and the user must request a new one
- Given a user requests an additional verification link, then any older verification link will expire
- Given correct account creation, the user should be redirected to their "User Page"
- Given correct implementation of the "User Page UI," when the user logs in correctly, they should be redirected to the user page
- Given correct implementation of the login page, when I enter an incorrect password, it should give me an error
- Given correct implementation of the login page, when I enter a username/email that is wrong, it should give me an error
- Given correct implementation of the login page, when I enter a correct username/email and password, I should be redirected to the user page

As a user, I would like to be able to edit my password and username

#	Description	Estimated Time	Owner
1	Update username/password (need to enter password twice and confirm with old password) into database	2 hr	Zack
2	Create Settings page	2 hrs	Zack
3	Create Edit Prompt	1 hr	Zack
4	Create methods for editing	2 hrs	Zack
5	Unit Testing for editing	3 hrs	Zack

- When the settings button is pressed, a settings system should appear to the user
- When the username and password are edited, they take immediate effect when confirmed
- Given that I want to edit my password, when I try to edit it, I should first be forced to enter my previous password
- Given that I am changing my email, when I click the submit button, it should send a verification link to the email I supplied
- Given that I have changed by email but have not confirmed it, it should only function as a login once I have clicked the verification link

As a reviewer, I would like to be able to view a page for each place, which contains information and reviews about that place

#	Description	Estimated Time	Owner
1	Create place class and add ability to store relevant information	2 hr	Evan
2	Design profile page for places and make it viewable	4 hr	Evan
3	Add ability for users to add new places and search for existing ones	2 hr	Evan
4	Unit testing for places	3 hrs	Evan

- Given correct implementation of the place class and place profiles, users can view a personalized page for each place which contains information such as location.
- Given correct implementation of place profiles, users can click buttons to navigate to specific sections of a place's information, such as pictures posted by users, reviews, owner comments, etc., given correct implementation of those systems.
- Given correct implementation of places and place profiles, users can search for places by typing any relevant information such as name or address. Matching places will be displayed to the user, and they can select one, taking them to the place's profile page.

As a user, I would like to follow other users so that I can see their reviews

#	Description	Estimated Time	Owner
1	Add "Follower" and "Following" object set	2 hrs	Evan
2	Add button to follow and unfollow other users	1 hr	Evan
3	Add UI showing followers and following users as well as the total count	2 hrs	Evan
4	Add unit testing for follow/unfollow buttons	2 hrs	Evan

- Given correct implementation of the "follower" and "following" sets, users should be able
 to see the number and username of every individual they are following and that are
 following them
- Given correct implementation of the "follow" button, the following user should have the target user added to their "following" list, and the target user should see the following user on their "follower" list.
- Given the correct implementation of the "unfollow" button, the user unfollowing another should have the target user removed from their "following" list, and the target user should no longer see the user who unfollowed them on their "follower" list.
- Given correct implementation of the "follower" and "following" lists, users should be able to use these lists to go to the publicly available user pages on the lists

As a user, I would like to add friends as people who follow me and I follow back

#	Description	Estimated Time	Owner
1	Create "Friends" lists	2 hrs	Evan
2	Edit the "Follow" button, adding both parties to each other's "Friends" list if the follow is mutual	1 hr	Evan
3	Add link to friends pages	2 hrs	Evan
4	Create unit tests for friending	2 hrs	Evan

- Given that my list of followers is accurate, when I click the follow button on one of my followers, they should automatically become a friend
- Given that I have created a friend, when I click unfollow, the other user should be removed from my friend list
- Given that I have created a friend, I should be able to click on their name and be taken to their profile page
- Given that I have created a friend, I should be given an option to message them
- Given that I have followed or unfollowed a user that follows me, the recipient user's following and friends lists should be updated automatically

As a reviewer, I would like to be able to add reviews (containing text and a number of stars) to places so that others can learn from my experiences there

#	Description	Estimated Time	Owner
1	Add review objects	2 hrs	Shaun
2	Add the ability to add text to reviews	1 hr	Shaun
3	Add ability to rate by stars	2 hrs	Shaun
4	Allow users to sort reviews by different criteria	3 hrs	Shaun
5	Add review unit testing	3 hrs	Shaun

- Given that classes for places have been implemented, I should be able to write a review which other users can see. Each review will include a star rating from 1 to 5, alongside the review's text.
- Given that reviews are implemented correctly, I should be able to like or upvote reviews, and reviews with more positive attention from users are more likely to show up first in the list.
- Given that reviews are implemented, I should be able to sort reviews by different criteria, such as likes/upvotes, star rating, or the time the review was posted. I should also be able to search for words contained in reviews.
- Given that reviews are implemented correctly, users cannot submit a review without text
- Given that reviews are implemented correctly, users cannot submit a review without giving a star rating

As a commenter, I would like to add comments to reviews so that I can argue for or against others' statements

#	Description	Estimated Time	Owner
1	Create comment class	2 hrs	Evan
2	Design comments section to display comments on each review	2 hrs	Evan
3	Extend review like/dislike system to comments	1 hrs	Evan
4	Allow users to expand and collapse comment threads	1 hr	Evan
5	Sort comments by likes, date, or the text in the comment	1 hr	Shaun
6	Add comments into database	1 hr	Shaun
7	Comment adding/viewing unit tests	3 hrs	Shaun

- Given that the comment system has been accurately implemented, when I click on the add comment button, it should allow me to write a new comment
- Given that I can write a new comment, when I click on the post button, it should automatically display my comment
- Given that I can add comments, when I click on an older comment in the history, I should be able to directly reply to that one
- Given that the comment section is implemented correctly, I should be able to expand and collapse the comment threads of each review
- Given that comments and the comment section is implemented correctly, I should be able to sort comments on a particular review by criteria like number of likes, date, etc.

As a user, I would like to be able to message friends so that I can coordinate schedules

#	Description	Estimated Time	Owner
1	Add "Message" button on a user's page that allows them to view any of their friends	2 hrs	Nitin
2	Clicking a person opens up a message popup UI and allows user to message friends	3 hrs	Nitin
3	Add a real-time refresh for messages without reloading page	3 hrs	Nitin
4	Add errors to messages that fail to send	2 hrs	Nitin
5	Add messages to the database	2 hrs	Nitin
6	Add messaging unit tests	3 hrs	Nitin

- Given that the user clicks the "Message" button, users should be able to browse and select a friend to message
- Given that the user clicks a friend, users should see the previous messages with that friend stored in the chat in the "chat window"
- Given that a user adds a message to the chat, it should show up on the other user's chat without the other user having to refresh
- Given that the user can send messages to others, when the user sends a message, it should appear on the right side and their friend's should be on the left
- Given that the user can send messages to others, when the user is not connected to the internet or there's another problem, an error should appear below the user's message

As a user, I would like to be able to delete my account

#	Description	Estimated Time	Owner
1	Add account deletion button under settings	1 hr	Joey
2	Remove user profile, posts, comments, and messages	2 hrs	Joey
3	Add deletion unit testing	3 hr	Joey

- Given the user enters the settings page, when a user clicks the delete account button, a confirmation window will appear.
- Given a correct implementation of a confirmation window, when a user confirms they want to delete their account, the account will be deleted if they wish.
- Given correct account deletion, when a user deletes their account, all data linked to their account will be removed
- Given that a user has deleted their account, when a user is attempting to login with deleted credentials, then the login will be unsuccessful.
- Given that a user has deleted their account, when a new user creates a new account, then they will be able to use that username.

As a user, I would like to be able to add likes and dislikes to reviews

#	Description	Estimated Time	Owner
1	Add a like and dislike button to reviews	2 hr	Jared
2	Add functionality to dislike/like (includes unliking a disliked comment if it was previously liked)	1 hr	Jared
3	Add functionality to show the total and separated like/dislike values	1 hr	Jared
4	Add likes/dislikes to the data of the reviews	1 hr	Jared
5	Like/dislike unit testing	2 hr	Jared

- Given that the review system has been accurately implemented, when I see a review I like/dislike, I should be able to click the button and like/dislike the post
- Given that I have liked/disliked a post, when I check the number of likes and dislikes at the bottom of the post, it should have updated to the new number
- Given that I have liked or disliked a post, the respective button should denote that I have already clicked it (e.g. change colors or fill in)
- Given that the number of likes and dislikes is accurate, when I click on the like/dislike button again, it should be removed

As a user, I would like to have a personal page for people to check out and see my stats

#	Description	Estimated Time	Owner
1	Create a webpage object for a profile	2 hr	Shaun
2	Create section element to populate webpage	2 hr	Shaun
3	Create sections for different user information	3 hr	Shaun
4	Calculate, format, and automatically update data for display	1 hr	Shaun
5	Add unit tests for profile elements	3 hrs	Shaun

- Given correct implementation of the webpage, users should be able to navigate to it to view another user's public profile information
- Given correct implementation of the webpage there should be organized sections for people to explore (including reviews, stats, etc)
- Given correct implementation of the webpage, the information displayed should be accurate, and public data from the user's account
- Given correct implementation of the webpage, the information displayed should update automatically
- Given correct implementation of the webpage, all possible data configurations should fit cleanly into formatted display

As a reviewer, I would like to be able to see my edit history for reviews so that I can revert to an earlier version if I liked it more

#	Description	Estimated Time	Owner
1	Create "Edit History" button on reviews that have been edited	1 hr	Joey
2	Add functionality to edit history button that pulls up all previous review versions	3 hr	Joey
3	Edit the entry in the database	2 hr	Joey
4	Remove items from edit history	1 hr	Jared
5	See the difference between the two reviews	4 hrs	Nitin
6	Unit tests for edit history	4 hrs	Nitin

- Given that I have edited a review, I should be able to click on the review and see the history of changes that have been made to it, organized by date
- Given that I have edited a review and I don't like that version, I should be able to click the edit history button and restore the previous version of it
- Given that I have restored a previous version, when I check the edit history, I should see duplicate items for the version I had chosen to restore and the latest version
- Given that I have restored a previous version, the website should show the differences between the two texts with new text in green and old text in red
- Given that I can see my edit history, when I see a version I don't like, I should be able to delete it from the edit history

As a reviewer, I would like to see statistics on how many reviews I have written, what my average number of likes is, and other data

#	Description	Estimated Time	Owner
1	Add section in profiles titled "Review Statistics"	1 hr	Jared
2	Add number of reviews to statistics section, viewable by all users	1 hr	Jared
3	Add average like number to statistics section, viewable by self only	1 hr	Jared
4	Add aggregate data (review quality, comments on reviews, average comments gotten on reviews) to statistics section, viewable by self only	2 hr	Jared
5	Review statistics unit testing	2 hr	Jared

- Given that profiles can be accessed, a "review statistics" button should display a screen to users with relevant review data for either their own profile or an another user's profile
- Given that the user is on a profile page, theirs or someone else's. there should be a "reviews and statistics" button.
- Given that the user clicks the reviews and statistics button, they should see the number of reviews and comments, likes and dislikes, etc.
- Given that the user whose statistics are being viewed does something which would change them, on page refresh the statistics should be updated.

As a user, I would like to be able to delete my messages

#	Description	Estimated Time	Owner
1	When hovering over a message sent by the user, display an option to delete it	2 hr	Joey
2	Have the message disappear from records when delete is selected	1 hr	Joey
3	Add an automatic refresh to the messaging system	2 hr	Joey
4	Add deletion unit testing	2 hr	Joey

- When a user hovers over a message a delete option will appear.
- When a user clicks the delete message option, a confirmation message will pop up.
- When a user deletes a message, the message will be immediately removed from the recipients' message histories.
- When a user deletes a message, previous and subsequent messages are not affected
- When a user attempts to delete another user's message, it will not give the delete option

As a user, I would like to be able to edit my messages

#	Description	Estimated Time	Owner
1	When hovering over a message, display an option to edit it	1 hr	Joey
2	Have the message change from records when edit is selected	1 hr	Joey
3	Edit message in the database	1 hr	Joey
4	Add editing unit tests	2 hr	Joey

- Given that messaging is implemented correctly, when a user hovers over a message, an option will appear to edit the data
- Given that messaging is implemented correctly, when a user clicks to edit their message, they are given access to the current text of their message to edit
- When a user submits an edit to a message, the user and recipients will immediately see the updated message in their message history.
- Given that messaging is implemented correctly, when a user edits their message, an edited symbol should appear near their message
- Given that a user has edited a message, when a user wants to see when a message was edited, they can hover over the message and see the time

As a user, I would like a light mode and a dark mode, as well as color palette options

#	Description	Estimated Time	Owner
1	Add a section in the user's page titled "Settings"	2 hrs	Zack
2	Add a button titled "Swap Mode"	1 hr	Zack
3	Add Swap Mode functionality that will bring up a list of modes that swap the color palette when chosen	3 hr	Zack
4	Add light and dark functionality to the pallet	3 hr	Zack

- Given that Swap Mode is implemented correctly, a user should be able to change the palette of the website to a coloring of their choice.
- Given that Swap Mode is implemented correctly, a user should be able to traverse all pages and see the correct color palette
- Given that Swap Mode is implemented correctly, a user should also be able to change the light mode on the website to their preference.
- Given that Swap Mode is implemented correctly, other user pages should appear to the current user as their selected palette, not the page owner's palette (this is a personal visual preference, not public page styling)

As a reviewer, I would like to see all of the reviews I have posted on my profile page

#	Description	Estimated Time	Owner
1	Add "Past Reviews" section to the user's profile page	2 hrs	Jared
2	Add likes and dislikes to the previous reviews in the Past Reviews section	1 hr	Jared
3	Add the location reviewed to in the Past Reviews section	2 hrs	Jared
4	Add unit test checking posted reviews	3 hr	Jared

- Given that the user profile page is implemented correctly, when a user is on their profile, there should be an option to view past reviews.
- Given that past reviews are implemented correctly, the user should be able to see their past reviews, likes and dislikes, and locations.
- Given that past reviews are implemented correctly, the user should see up-to-date reviews (ie, see edits and not see deleted reviews) after any changes
- Given that past reviews are implemented correctly, data related to the review (likes, dislikes, comments) should update automatically
- Given that past reviews are implemented correctly, the user can update (edit or delete) reviews from the past review section

As a reviewer, I would like to be able to edit my reviews so that they contain my accurate opinions

#	Description	Estimated Time	Owner
1	Create "Edit" button on reviews created by the user	1 hr	Jared
2	Put an edited marker on the review after the review is edited and update the timestamp	1 hr	Jared
3	Add the edited review into the database	2 hrs	Jared
4	Add unit testing for editing	2 hr	Jared

- Given that the editing system has been implemented correctly, when I click on the edit review button, I should see the old review and be able to change aspects of it and submit them
- Given that I can submit my changes to a review, the timestamp of the review should update to the current time to indicate the change and a flag indicating that the review has been edited should appear with the review
- Given that a review has been edited, when I submit my change the text of the review will reflect the edit
- Given that a review has been edited, all other users should see the change automatically
- Given that a review has been edited, the comments on the review, likes, dislikes, and any other related data remain undisturbed

Remaining Backlog

Functional

Green: New addition to backlog, Yellow: Being used in sprint, Red: Removed from backlog

- As a user, I would like to be able to create an account so that I can save my information
- 2. As a user, I would like to be able to edit my password and username
- 3. As a user, I would like to be able to recover my password by email so that I avoid losing my account
- 4. As a user, I would like to be able to delete my account
- 5. As a user, I would like, if I am considered credible by other users (judged by the number of followers, likes, and quality of reviews according to the moderation team) to have my reviews and likes have more weight
- 6. As a user, I would like to follow other users so that I can see their reviews
- 7. As a user, I would like to block other users so that I no longer see their reviews and they cannot post comments on mine
- 8. As a user, I would like to be able to add likes and dislikes to reviews
- 9. As a user, I would like to be able to see how many reviews someone has written
- 10. As a user, I would like to be able to read reviews even without an account
- 11. As a user, I would like to view other people's profiles
- 12. As a user, I would like to be able to message friends so that I can coordinate schedules
- 13. As a user, I would like to be able to edit my messages
- 14. As a user, I would like to be able to delete my messages
- 15. As a user, I would like to send media like images in messages
- 16. As a user, I would like to be able to add rich text like bold and italics to messages
- 17. As a user, I would like to add friends as people who follow me and I follow back
- 18. As a user, I would like to see the reviews categorized with gold reviews being friends, silver reviews being people I follow, and bronze reviews being everyone else
- 19. As a user, I would like to see the credibility of users' reviews
- 20. As a user, I would like the UI to scale to computers and phones of all sizes for ease of use
- 21. As a user, I would like to have a personalized page for people to check out and see my stats

- 22. As a user, I would like to hide my profile from searches
- 23. As a user, I would like to restrict my profile to only friends or friends of friends
- 24. As a user, I would like to be able to see a feed of the most recent posts of people I follow
- 25. As a user, I would like to be able to send files through messages to other people
- 26. As a user, I would like to be able to share calendars with other people
- 27. As a user, I would like to be able to report inappropriate content so that a moderator's attention will be drawn to it (separate than marking reviews as offensive, also covers comments and chats)
- 28. As a user, I would like to be able to invite people with an email link to join my travel group
- 29. As a user, I would like to be able to remove people from my travel group
- 30. As a user, I would like ownership of a trip to transfer to the member of the trip who joined second if the trip creator leaves or is removed from the product or allow the trip planner to designate a new group leader

31. As a mobile user, I would like to be able to take pictures in the app

- 32. As a user, I would like to be able to see a consensus on how people feel about a location (if time permits)
- 33. As a user, I would like to be able to tag other users with @ or use # to search for categories and I would like to send clickable hyperlinks in messages and reviews
- 34. As a user, I would like to be able to see a map of all the places I have reviewed (if time permits)
- 35. As a user, I would like to be able to sort the reviews based on the star rating so that I can see the worst and best experiences
- 36. As a user, I would like a light mode and a dark mode
- 37. As a trip planner, I would like to create groups so that I can plan trips with them
- 38. As a trip planner, I would like to be able to create trips so that the different schedules can be separated and I would like to be able to delete those trips
- 39. As a trip planner, I would like to create events for my trip on a specific day so that I can organize my trip
- 40. As a trip planner, I would like to be able to see those events in a calendar so that I can visually see where I need to be and at what time
- 41. As a trip planner, I would like to be able to see the locations on a map so that I can quickly find where I need to go

- 42. As a trip planner, I would like to be able to create reminders for events so that I know when to leave
- 43. As a trip planner, I would like to be able to export those events to another calendar so that I have multiple methods of keeping track of my schedule
- 44. As a reviewer, I would like to be able to view a page for each place, which contains information and reviews about that place
- 45. As a reviewer, I would like to be able to add reviews (containing text and a number of stars) to places so that others can learn from my experiences there
- 46. As a reviewer, I would like to be able to edit my reviews so that they contain my accurate opinions
- 47. As a reviewer, I would like to be able to see my edit history for reviews so that I can revert to an earlier version if I liked it more (if time allows)
- 48. As a reviewer, I would like to add media like images to my reviews to give a better idea of what the place is like
- 49. As a commenter, I would like to add comments to reviews so that I can argue for or against others' statements
- 50. As a reviewer, I would like to delete my reviews, which also delete their associated comments
- 51. As a commenter, I would like to delete my comments, but if my comment has any replies, they will still be visible and my comment's author and text will simply change to "[deleted]"
- 52. As a reviewer, I would like to see statistics on how many reviews I have written, what my average number of likes is, and other data
- 53. As a reviewer, I would like to see all of the reviews I have posted on my page
- 54. As a moderator, I would like to ban users who are spreading inappropriate content
- 55. As a user, I would like to appeal a ban if I receive one that I believe is unfair
- 56. As a moderator, I would like to be able to unban users who make an appeal and seem genuine about changing their ways
- 57. As a moderator, I would like to be able to see and message other moderators so that communication is simpler
- 58. As a moderator, I would like to be able to remove inappropriate comments or reviews
- 59. As a moderator, I would like to see reports with the reporting user, report reason, and attached content
- 60. As a moderator, I would like to be able to see who has specifically liked, disliked, and flagged reviews while regular users can only see totals

- 61. As an owner of a location, I would like to be able to claim ownership of that location
- 62. As the owner of a location, I would like to be able to add links to my website or a phone number so that people can contact me and book
- 63. As a user, I want to stay logged in even if I close my browser so that I don't have to log in every time

Non-Functional

We aim to:

- Accommodate 50,000 users simultaneously
- Have a delay of less than 1s per request
- Achieve 99% uptime
- Encrypt private user data (not publicly shared text)
- Have 80% testing coverage

We want this program to operate as a small-scale test-bed for a new social media style, capable of expanding to a larger audience in the future. We will provide optimizations and usability expansions in the future, should this endeavor prove successful, but this program is meant to serve as a proof of concept. This is the reasoning behind the relatively lax requirements for simultaneous user count and response time for a social media program. We are focusing on functionality first, with the ability to expand and improve speed as necessary. However, we will be aiming for 99% uptime, as would be expected from a peer service of our caliber. We feel this, as a core requirement of the software, should be implemented at the ground level to ensure functionality and compatibility with our other functions. We plan to encrypt private and friend-only (if applicable) data to prevent abuse but see no reason to slow down our software securing public information. Despite the computational overhead, we feel this is necessary to grow trust in our brand from the outset. Finally, our test cases aim to cover 80% of the functionality of this program. This is, in our opinion, a reasonable standard to publish under to ensure a quality brand image and build trust with our users.