

# Sprint 3 Planning Document

Team: 4

Project: UniLyfe

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CS 307: Sprint 3 Planning Document

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**Sprint Overview** 

During the third sprint, we hope to polish up some of the major features that we

implemented in the second sprint as well as make our app more interactive with our

audience by developing a more thorough COVID tracker as well as a friends feature.

Scrum Master: Unnati Singh

Meeting Plan: Mondays 10pm, Tuesdays 10pm, Thursdays 10pm

**Risks and Challenges:** 

The biggest challenge we anticipate is finishing all of the work we assign ourselves

during this last sprint as well as readying the app for the final demo. There are no more

sprints after this, so we cannot afford to leave a user story half complete and assume we

can revisit it later. Another challenge would be finishing the previous user stories while

working on the current user stories. Luckily, we managed time extremely well for the

last sprint, but some unfinished tasks from sprint 1 may be worth dedicating time to

now.

# **Current Sprint Detail**

**User Story** #1: As a developer, I would like to store photos in the database.

#	Description	Estimated Time	Owner
1	Add a collection for photo posts in the database.	2 hrs	Carolyn
2	Have users' photo posts show up on the home page.	5 hrs	Carolyn
3	Store the photo of the photo post in the database.	3 hrs	Carolyn
4	Test and debug functionalities	1 hr	Carolyn

- Given that the photos are stored correctly in the database, the developer should be able to see the photo post field in the database.
- Given that the photos are stored correctly in the database, the developer should see the photo post in the collection for photo posts after the user creates one.
- Given that the photos are stored correctly in the database, the photo should appear on the home page after a user creates a post with a photo in it.

**User story** #2: As a user, I would like to earn profile awards for reaching a certain number of points.

#	Description	Estimated Time	Owner
1	Make a user attribute for awards in the database.	2 hrs	Carolyn
2	Have awards icons show up on the user profile page if the user is eligible for awards.	4 hrs	Carolyn
3	Find and upload icons for awards.	3 hrs	Carolyn
4	Insert a page in the menu that details the rules for earning awards.	2.5 hrs	Carolyn
5	Test and debug functionalities for the user profile awards.	1 hr	Carolyn

- Given that the features for profile awards are implemented correctly, the user should be able to learn the rules of the awards system in the menu.
- Given that the features for profile awards are implemented correctly, the user should see a change in their profile page UI whenever they reach a certain number of points.
- Given that the features for profile awards are implemented correctly, there should be an attribute for awards that is updated every time the user earns an award in the database.

**User story** #3: As a user, I would like to add more places which not many students know about.

#	Description	Estimated Time	Owner
1	Implement ability for users to add location on the UI for creating a post.	3 hrs	Carolyn
2	Add a field for the location of a post in the database.	3 hrs	Carolyn
3	Connect the location selected on the post to the location field on the database.	3 hrs	Carolyn
4	Test and debug functionalities of the location function on posts.	1 hr	Carolyn

- Given that the location selector is implemented correctly, the user should be able to select a location when creating a post.
- Given that the location selector is implemented correctly, a location should be stored in the location field in the database in the collection for posts.
- Given that the location selector is implemented correctly, the location selected by the user should match the one in the database.

**User story** #4: As a user, I would like to be able to report users for inappropriate content (racism/hate speech).

#	Description	Estimated Time	Owner
1	Add a button to the posts so that the user can click on the button.	2 hour	Ramitha
2	Create a series of survey questions to know more about the user's feedback.	4 hours	Ramitha
3	Add the users' feedback into Cloud Firestore.	4 hours	Ramitha
4	To test: Test and debug the survey functionality to ensure that the users are able to access the survey.	1 hour	Ramitha

- Given that the review survey is implemented correctly, the posts should have a button which leads the user to the survey.
- Given that the review survey is implemented correctly, the user should be able to answer the questions on the survey.
- Given that the review survey is implemented correctly, user feedback from the reviews should be stored successfully into the database.

**User story #5**: As a developer, I would like to remove reported posts.

#	Description	Estimated Time	Owner
1	Implement the functionality to count the number of people who have reported the post.	2 hour	Ramitha
2	Implement the functionality to remove the post once the count has been exceeded.	4 hours	Ramitha
3	Store the deleted posts into firebase to still have access to the deleted posts as a developer.	3 hours	Ramitha
4	To test: Test and debug the survey functionality to ensure that the posts get removed properly.	1 hour	Ramitha

- Given that removing posts is implemented correctly, the post should be deleted from the homepage once the limit number of reports is reached.
- Given that removing posts is implemented correctly, the post should be deleted from the subpages once the limit number of reports is reached.
- Given that removing posts is implemented correctly, the post information should still be accessible as a developer.

**User story** #6: As a user, I would like to add information about events happening on campus.

#	Description	Estimated Time	Owner
1	create a tag to add information about events happening on campus.	2 hours	Ramitha
2	Allow users to create a post related to events and enable the users to add information about the event.	5 hours	Ramitha
3	Display the events on the subpage.	2 hours	Ramitha
4	Display a notification of the upcoming events which are 5 days away	2 hours	Ramitha
5	To test: Test and debug the events post functionality.	1 hour	Ramitha

- Given that the events post is implemented correctly, when the user clicks the post button, then the post should be visible.
- Given that the events post is implemented correctly, the user should be able to view all the information required such as the time of the event, location of the event.
- Given that the events post is implemented correctly, the user should be able to view the notification.
- Given that the events post is implemented correctly, the information should be stored in Firebase.

**User story** #7: As a user, I would like to update my profile picture.

#	Description	Estimated Time	Owner
1	Research more about the image picker that flutter provides	3 hours	Unnati
2	Since the image picker function is not really working on my laptop, collaborate with Gayathri and try to figure out how to update the profile picture on the users screen.	3 hours	Unnati
3	Figure out how to store the profile picture in the database.	3 hours	Unnati
4	To test: Test and debug the updating profile picture functionality.	1 hour	Unnati

- Given that the updating profile picture is implemented correctly, when the user changes pages and comes back to the profile page, their profile picture should still be there.
- Given that the updating profile picture is implemented correctly, when the user logs out of the app and signs in again, their profile picture should still be there.
- Given that the updating profile picture is implemented correctly, the picture information should be stored in firebase under the userdata category.
- Given that the updating profile picture is implemented correctly, the picture should show up on their friend cards on the search page.

**User story** #8: As a user, I would like to make friends with those who have similar interests, taking the same/similar classes, and those who are in the same/similar clubs/extracurricular activities as me.

#	Description	Estimated Time	Owner
1	Create a "friends" channel on the profile page.	2 hours	Unnati
2	Create a "friend" card similar to the post card that gets generated when a user creates their account and modified when a user updates their information.	5 hours	Unnati
3	Create a following friend functionality so you can follow friends if you want. These would ideally show up in the "friends" channel.	3 hours	Unnati
4	To test: Test and debug the following friends functionality.	1 hour	Unnati

- Given that the making friends function is implemented correctly, you should be able to see all the friends on the search page, and their information should be modified when a user updates their information.
- Given that the making friends function is implemented correctly, when you view a friends card, you should be able to click a "follow" button which will add this friend to your list of friends. The "follow" button should remember its state once the app is closed or the user signs out
- Given that the making friends function is implemented correctly, when you visit the profile page and go to the "friends" tab, all the friends you've followed should appear.

**User story** #9: As a developer, I would like to access and analyze information that users upload about themselves for their profile.

#	Description	Estimated Time	Owner
1	On the body of the search page, create a "suggested" section.	2 hours	Unnati
2	Add friends who have either the same classes or the same hobbies or both in this suggested section.	7 hours	Unnati
3	To test: Test and debug the suggested friends functionality.	1 hour	Unnati

- Given that the suggesting friends function is implemented correctly, when you visit the search page, you should be able to see friends that have either the same classes or hobbies or both in this section.
- Given that the suggesting friends function is implemented correctly, when you follow these friends, they should be visible under the friends channel on the profile page.
- Given that the suggesting friends function is implemented correctly, when you unfollow a friend via the search page, they should no longer be visible under the friends channel on the profile page.

**User story** #10: As a user, I would like to be able to delete any comments or posts I have made.

#	Description	Estimated Time	Owner
1	Research how to remove a document/collection from Cloud Firestore through Dart code.	1.5 hrs	Isha
2	Add a button to all posts with a garbage icon that will delete the post when pressed.	2 hrs	Isha
3	Implement a swipe to delete feature for comments after researching the Dismissable widget.	3 hrs	Isha
4	Add a warning message to make sure the user actually wants to delete the comment/post.	2.5 hrs	Isha
5	Test the functionality to make sure that comments/posts are properly deleted from Cloud Firestore, and that they are no longer displayed after being deleted.	1 hr	Isha

- Given that the warning message works as intended, if a user clicks on the delete button of a post or swipes left on a comment, the user should be prompted with a warning message asking them if they really want to delete the comment/post.
- Given that the delete comment/post feature works as intended, if a user proceeds to click 'Yes' on the warning message, the comment/post will be deleted in Cloud Firestore. In addition, it will no longer be displayed in the app.

- Given that the delete comment/post feature works as intended, after a comment is deleted, it should no longer show up in the user's comment history. Similarly, after a post is deleted, it should no longer show up in a user's liked post section.
- Given that the delete comment/post feature works as intended, after a post is deleted, all comments on that post should be deleted as well.

**User story** #11: As a user, I would like to avoid COVID hotspots on/near campus which are displayed by red dots on the map by seeing a list of these locations.

#	Description	Estimated Time	Owner
1	Research the Google Maps API, and figure out how to add custom markers to the map. Figure out how this API can be used in conjunction with Cloud Firestore.	2.5 hrs	Isha
2	Create a collection in Cloud Firestore that will store a list of locations users with COVID-19 have been.	3 hrs	Isha
3	Retrieve data from this collection in Cloud Firestore. Display a red dot at each location specified in the data.	5 hrs	Isha
4	Create an info page that displays a list of locations and their number of COVID-19 cases.	2 hrs	Isha
5	Test to ensure that red dots are properly being displayed on the map, and that the list on the info	1 hr	Isha

page displays the locations with the most COVID-19 cases.	

- Given that the collection in Cloud Firestore is implemented correctly, when users with COVID-19 log the locations they've been to, this collection should update with those locations.
- Given that the map feature is implemented correctly, all of the locations in the collection from Cloud Firestore should be marked on the map with a red dot.
- Given that the info page is implemented as expected, when clicked, the user should be able to see a list of the locations with the number of COVID-19 cases at that location.

**User story** #12: As a developer, I would like to provide a default avatar to all users when they first sign up.

#	Description	Estimated Time	Owner
1	Add a 'color' field in the userData collection on Cloud Firestore for each user. Assign users a random color when they first sign up.	2 hrs	Isha
2	Research the CircleAvatar class in Dart or similar classes to figure out the best way to construct a default avatar.	1.5 hrs	Isha
3	Using the user's color field and the first letter of their display name, construct a default avatar.	3 hrs	Isha

4	Add an option on the profile page allowing users to remove their current profile picture, replacing it with their default avatar.	2.5 hrs	Isha
5	Test to ensure that the default avatar is being constructed correctly, and that users are able to remove their current profile pic in favor of the default avatar.	1 hr	Isha

- Given that the default avatar feature is working as intended, when a user first signs up, they should now have a 'color' field in the userData collection. This field should have a randomized color code associated with it, representing the user's default avatar color.
- Given that the default avatar feature is working as intended, assuming the user does not have a profile picture set, they should now have a default avatar in place of the profile picture on the profile page and all comments made by the user. The default avatar should be a circle with the user's default avatar color as the background color and the first letter of the user's display name.
- Given that the default avatar feature works as intended, if the user changes their display name, the default avatar should update with the new first letter of the display name.
- Given that the remove current profile picture feature works as intended, when the user clicks on this option, the current profile picture should be replaced with the default avatar on the profile page and all comments made by the user.

**User story** #13: As a user, I would like to write reviews about housing and restaurants that are located on or near campus.

#	Description	Estimated Time	Owner
1	Add a pressable button called "Create a review" located in the (+) or create page	2 hours	Gayathri
2	Once the button is clicked, the user is taken to a page that has a dropdown list of predetermined locations on/near campus	3 hours	Gayathri
3	Once the user chooses a location, they are presented with a 5 star rating system where they can rate that location.	2 hours	Gayathri
4	Implement functionality so that each star is able to be clicked up to the desired value	2 hours	Gayathri
5	Implement functionality so that users can rate reviews with extra precision. For example: 3.5 stars	2 hours	Gayathri
6	Test and debug functionality so that users can create residence hall/apartment reviews	1 hour	Gayathri

# Acceptance criteria:

• Given that a user wants to create an residence hall/ restaurant review, when they click on the + to create a post, there should be a fourth option called "Create a review."

- Given that the user wants to rate location on campus, when they click on the "Create a review" button, they should be directed to a page that has a dropdown list of locations on/near campus.
- Given that the user wants to share their opinion on a certain location, when they click on the 5 star rating scale, their choice is saved in Firebase.
- Given that the 5 star rating system is implemented correctly, when the user wants to rate a location, they can click on the number of stars they want to rate it, and the stars stay highlighted at that value.
- Given that the 5 star rating system is implemented correctly, when the user clicks on half a star, only half that star stays highlighted. In other words, users don't have to rate locations with whole numbers only.

**User story** #14: As a developer, I would like to have access to information pertaining to the locations and location ratings.

#	Description	Estimated Time	Owner
1	Ensure that the 5 star rating that a user chooses is saved in Firebase	3 hours	Gayathri
2	Ensure that the location that a user chooses is saved in Firebase	3 hours	Gayathri
3	Display the user's rating for that location on the UI near the 5 star rating scale	4 hours	Gayathri
4	Conduct manual tests that ensures that the Firebase database is updated with the location rating data	1 hour	Gayathri

- Given that the user rates a location out of 5 stars, the number of stars they rate a post is stored in Firebase.
- Given that the user chooses a location from the dropdown list of locations, the particular location they chose is stored in Firebase.
- Given that the user has reviewed a location by ranking it out of 5 stars, their 5 star ranking is displayed on the UI next to the 5 star rating scale.

**User story** #15: As a user, I would like to *read* reviews about housing and restaurants that are located on or near campus.

#	Description	Estimated Time	Owner
1	Add a section called "Reviews" as a fourth subpage of the UI	2 hours	Gayathri
2	After the user finishes creating their review, their 5 star review should be displayed on the "Reviews" subpage.	3 hours	Gayathri
3	After the user finishes creating their review, the location that they choose from the dropdown list should be displayed on the "Reviews" subpage	3 hours	Gayathri
4	If time allows, implement the functionality so that to posts that have the highest rating out of 5 stars show up first	3 hours	Gayathri
5	Test and debug functionality that allows users to rate reviews out of 5 stars	1 hour	Gayathri

- Given that the user wants to see reviews of a location on campus, when the user clicks on the "Reviews" subpage, they are presented with reviews of various locations on/near campus.
- Given that the user looks at the Reviews subpage, if the user wants to know what location the review is on, they are able to see the name of the location near the 5 star rating
- Given that the user looks at the Reviews subpage, if the user wants to know how many stars a particular user rated that location, they can look at the post and they are able to see the filled in stars corresponding to their rating.

# **Remaining Backlog**

## **Functional Requirements:**

- 1. As a user, I would like to create a new account with a username and password
- 2. As a user, I would like to log in using my college email account through Google or Email/Password.
- 3. As a user, I would like to reset my password if I forget it so that I can continue using my account.
- 4. As a user, I would like to log in using my Purdue Career Account (if time allows)
- 5. As a user, I would like to be able to edit certain elements of my profile.
- 6. As a user, I would like an information button or tutorial with explanation of each feature in the app
- 7. As a user, I would like to easily access the different subsections of the application making the app user friendly.
- 8. As a user, I would like to post reviews highlighting my experience in locations near Purdue University.
- 9. As a user, I would like to see all recent posts on my home feed.

- 10. As a user, I would like to read reviews posted by others regarding their experiences in locations near Purdue University.
- 11. As a user, I would like to add pictures of/information about myself so I can easily get matched to people.
- 12. As a user, I would like to view the profile of the post creator or the comment creator.
- 13. As a user, I would like to make friends with those who have similar interests, taking the same/similar classes, and those who are in the same/similar clubs/extracurricular activities as me.
- 14. As a user, I would like to know where COVID hotspots are located graphically on a map.
- 15. As a user, I would like to avoid COVID hotspots on/near campus which are displayed by red dots on the map by seeing a list of these locations.
- 16. As a user, I would like to anonymously log the places I have visited recently on the app if I have tested positive for COVID.
- 17. As a user, I would like to see how many people who have tested positive for COVID
- 18. As a user, I would like to see how many people with COVID have been in a certain building recently.
- 19. As a user, I would like to create polls to gather feedback on popular locations.
- 20. As a user, I would like to try to find quiet, empty places to study.
- 21. As a user, I would like to read the opinions of my peers to know what food is good at the dining courts.
- 22. As a user, I would like to rate specific foods served at the dining courts (i.e. what sauces are best at the stir fry place in Earhart)
- 23. As a user, I would like to add specific foods served at the dining courts (i.e. Earhart is now serving X weird ice cream flavor)
- 24. As a user, I would like to be notified whenever someone makes a post about a certain topic (i.e. free food on campus, dining court reviews, photos from a certain location).

- 25. As a user, I would like to add topics I am interested in to my wishlist which can be used to get notifications or/and make new friends (i.e. Ramitha and you like to study at Lawson)
- 26. As a user, I would like to rate places based on my personal experience.
- 27. As a user, I would like to be able to search for keywords across all posts on the app.
- 28. As a user, I would like to filter locations based on how high their ratings are.
- 29. As a user, I would like to filter posts on my home feed by reviews, ratings, or polls.
- 30. As a user, I would like to explore places which only Purdue students know (ex: top of Lawson).
- 31. As a user, I would like to add more places which not many students know about.
- 32. As a user, I would like to upload photos so that my peers will have an idea of what the place is like.
- 33. As a user, I would like to add comments regarding my experiences at certain places.
- 34. As a user, I would like to read reviews on residence halls so that I know the most popular places to live (if time allows).
- 35. As a user, I would like to add information about events happening on campus.
- 36. As a user, I would like to read/write reviews on residence halls and nearby apartments (if time allows).
- 37. As a user, I would like to earn points by posting on the app and interacting with people on the app.
- 38. As a user, I would like to redeem points for possible incentives (i.e. coupons)
- 39. As a user, I would like to be able to report users for inappropriate content (racism/hate speech)
- 40. As a user, I would like to be able to report posts for inappropriate content (racism/hate speech)
- 41. As a user, I would like to see a completely randomized post/event/comment/location (if time allows)

- 42. As a user, I would like to indicate whether or not I thought a review was helpful by implementing a like button.
- 43. As a user, I would like to view my comment history.
- 44. As a user, I would like to view all the posts I have ever liked.
- 45. As a user, I would like to be able to delete any comments or posts I have made.
- 46. As a user, I would like to earn profile awards for reaching a certain number of points.
- 47. As a user, I would like to read reviews about housing and restaurants that are located on or near campus.
- 48. As a user, I would like to write reviews about housing and restaurants that are located on or near campus.
- 49. As a developer, I would like to access and store the username and password data for each user.
- 50. As a developer, I would like to access the data inputted by the user to display it properly
- 51. As a developer, I would like to access and analyze information that users upload about themselves for their profile.
- 52. As a developer, I would like to filter out possibly harmful words in the comments/posts.
- 53. As a developer, I would like to filter out inappropriate photos users have posted.
- 54. As a developer, I would like to remove reported posts
- 55. As a user, I would like to input personal information when signing up with a new account on the app.
- 56. As a developer, I would like to store photos in the database.
- 57. As a developer, I would like to have access to information pertaining to the locations and location ratings.
- 58. As a developer, I would like to provide a default avatar to all users when they first sign up.
- 59. As a user, I would like to update my profile picture.