**CS490**

**Blitz**

**Sprint 3 Retrospective Document**

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**1. Implemented and working:**

**Functional Requirement:**

1. As an user, I would like to receive notification when I get message from other users.
2. iOS:
3. Description: Implementing Push message
4. Work time: 5 hrs
5. Member: Jing Chang

Complete: To realize the notification functionality, we make use of the IOS system native API

3 As an user, I would like to have a listview on services requested/provided nearby.

a. Server

1. Description: Return the list of posts that are close to current user.
2. Work time: 11 hrs
3. Member: Zheng Chen

Complete:To locate the geographically nearest group of users, the server leverage GPS coordinates sent along with users’ requests and does the calculation to sort the distances.

4 As an user, I want to have some recommend posts when I am trying to post similar request

* 1. Server:
     1. Description: Implementing match function on the server side
     2. Work time: 15 hrs
     3. Member: Yuying Wang

1. As an user, I would like to see other people’s feedback scores.
   1. Server:
      1. Description: Implementing rating functions
      2. Work time: 5 hrs
      3. Member: Hanchen Li
2. As an user, I would like to sort the services provided by time/location.
3. Server
   * 1. Description: Design a filter for Posts by time/ location
     2. Work time: 10 hrs
     3. Member: Dingzhe Li
4. iOS:
   * 1. Description: Add a control to specify how to sort Posts (e.g. by time/ location)
     2. Work time: 5 hrs
     3. Member: Tianyang Yu

Complete: We implement a sorting algorithm based on timestamps, longitude and altitude features of each post. So when the button is clicked, all the post will be sorted by time/ location.

1. As an user, I want to give a feedback to provider/requester when the service is completed.
   1. Server:
      1. Description: Implementing API for leaving comment.
      2. Work time: 10 hrs
      3. member: Dingzhe Li

***IOS:***

**General:**

1. As an user, I would like to provide service for existing requests.
   1. iOS:
      1. Description: Add a button to post’s detail page to let user response to a post by entering offered price and comments in pop-up window.
      2. Work time: 5 hrs
      3. Member: Jing Chang

Complete: We add a button on the right corner and draw a response which have two text fields for comment and price.

1. As a carpool requester, I should be able to see a list of service provider who interested in providing the service, and the price they want.
   1. iOS:
      1. Description: Add a subview in the detail page of self-owned post to show the list of responses.
      2. Work time: 10 hrs
      3. Member: Tianyang Yu

Complete: We add a button and implement a table view for the response list. User can click the response item and a detail page will pop up.

1. As an user, I would like to select one from several service providers who respond to my request.
2. iOS:
   * 1. Description: Implement a view to let users select candidates.
     2. Work time: 5 hrs
     3. Member: Jing Chang

Complete: In the response detail page, there are detail for this response and a button for selection. If user believe this response is the best deal, then he/her could click the button.

1. As an user, I would like to receive notification when my request get accepted.
   1. iOS:
      1. Description: Implement a notification when receive notification from server that indicates that user request has been accepted.
      2. Work time: 10 hrs
      3. Member: Jing Chang

Complete: There is a thread create when the app is running. This thread

will pull the notification request from the server. When some events have been completed, the app will post a notification on server,

1. As an user, I want to close my request / service at anytime.
   1. iOS:
      1. Description: Add a button in the post’s detail page to close the post.
      2. Work time: 2 hrs
      3. Member: Jing Chang

Complete: There is a button on the post`s detail page and user could click the button to delete the post. And the request/service will be closed at the same time.

1. As an user, I want to check the satisfaction rating of service provider / requester.
   1. iOS:
      1. Description: Add the rating control to the post’s detail page.
      2. Work time: 2 hrs
      3. Member: Jing Chang

Complete: In the post and response detail page, the username of the corresponding user will link to the user profile page. In this page, there is rating view that user could click and the provider/requester could rate.

1. As an user, I would like to have a search box to search for certain request or service.
   1. iOS:
      1. Description: Add a search box in the main page to search the correlated post and reload the listview.
      2. Work time: 5 hrs
      3. Member: Jing Chang

Complete: There is a search box in the right menu. When user type some word, the app will request the related posts.

1. As an user, I would like to have a in-progress list for services that is waiting to be responded.
   1. iOS:
      1. Description: Add a view that displays the in-progress list.
      2. Work time: 5 hrs
      3. Member: Tianyang Yu

Complete: Make a query setting owner equals to self’s username and transactionComplete equals false to get the whole list of correlated in-progress posts, then feed them into the in-progress section of related post page.

1. As an user, I would like to have a history list for services that requested or provided before.
   1. iOS:
      1. Description: Add a view that displays the history list.
      2. Work time: 5 hrs
      3. Member: Tianyang Yu

Complete: Make a query setting owner equals to self’s username and transactionComplete equals true to get the whole list of correlated finished posts, then feed them into the history section of related post page.

1. As an user, I want to give a feedback to provider/requester when the service is completed.
   1. iOS:
      1. Description: Add a rating wedge for each request in the history list.
      2. Work time: 5 hrs
      3. Member: Tianyang Yu

Complete: In the user profile page, there is a rating view which is clickable. When a user rates another user, the app will send a request to server, and server will count the new rating score and send back to the client app.

**Food Discover**:

1. As a service provider, I would like to create a new service by providing information about menu, food pictures, remaining quantity, location and hours.
   1. iOS:
      1. Description: Add sub-view in the create post page for the food discover post
      2. Work time: 5 hrs
      3. Member: Tianyang Yu

Complete: Add a subview for category ‘foodDiscover’ to take location and hours from the user.

**House rental:**

1. As an user, I would like to see the pictures of the house.
   1. iOS:
      1. Description: Add a container to show the picture.
      2. Work time: 6hrs
      3. Member: Jing Chang

Complete: There are imageview in the post detail page. When loading the post, the app will request the image file from server.

1. As an user, I want to be able to know things like whether there have wifi, air conditioner, refrigerator and etc.
   1. iOS:
      1. Description: Implement more checkboxes for different options upon creating.
      2. Work time: 3 hrs
      3. Member: Tianyang Yu

Complete: Add a subview for category ‘House Rental’ to take location (using mapview) and applied amenities (multiple checkboxes) from the user.

1. As an user, I would like to choose the check in date and check out date when I making an order.
   1. iOS:
      1. Description: Add two field that let user to choose the check in and check out date.
      2. Work time: 2 hrs
      3. Member: Tianyang Yu

Complete: Add two textfields using datePicker as inputview into subview for category ‘House Rental’. Also implement error checking to ensure check-in date is before check-out date.

**Other:**

1. As an user, I would like to post a request/provide in the “Other” category for the uncategorized service.
   1. iOS:
      1. Description: Add a category named “Other” and add a new post page for this kind of post.
      2. Work Time: 5 hrs
      3. Member: Zhicheng Zhou

Complete: Add a subview for category ‘other’ which will get user’s location in the background (with user’s permission) and use this location as the position of the post.

1. As an user, I would like to see requested/provided service that other people post in the “Other” category
   1. iOS:
      1. Description: Add the “other” category in filter and category picker.
      2. Work Time: 5 hrs
      3. Member: Zhicheng Zhou

Complete: Add the “other” category in filter and category picker. Also make it compatible with sorting by location.

***Android:***

1. As an user, it is great if the client can automatically match the request to people who are providing service the exact same service.
   1. Android:
      1. Description: Matching requests based on the keywords in the title.
      2. Work time: 5 hrs
      3. Member: Dingzhe Li

Complete: Whenever a user tries to make a new request, the application will search for a similar post in the database. If there is a match, the user will get a notification about that.

1. As an user, I would like to select one from several service providers who respond to my request.
   1. Android:
      1. Description: Implementing the accept option in the post detail page.
      2. Work time: 5 hrs
      3. Member: Dingzhe Li

Complete: In the post detail page, user are able to choose one offer from the response list, once the offer is selected, that user will get a notification about that.

1. As an user, I would like to receive notification when my request get accepted.
   1. Android:
      1. Description: Implementing the notification system to the application.
      2. Work time: 8 hrs
      3. Member: Zheng Chen

Complete: When my request get accepted, I will get a notification from the application, and it works no matter the app closed or not.

1. As an user, I want to close my request / service at anytime.
   1. Android:
      1. Description: Implementing the close option in the detail page.
      2. Work time: 2 hrs
      3. Member: Dingzhe Li

Complete: In the post detail page, the owner is able to close the post, and it will not be shown again.

1. As an user, I want to check the satisfaction rating of service provider / requester.
   1. Android:
      1. Description: Implementing the rating feature for every user.
      2. Work time: 8 hrs
      3. Member:Zheng Chen

Complete: We are now able to check the rating of a user, and the rating will be shown on their profile page.

1. As an user, I would like to have a search box to search for certain request or service.
   1. Android:
      1. Description: Put a search box on the main page of the application, enable user to search posts by keyword.
      2. Work time: 8 hrs
      3. Member:Zheng Chen

Complete: On the top of the main page, there is a search box that user can type in the keywords, and the application will filter out the matching posts.

1. As an user, I would like to have a history list for services that requested or provided before.
   1. Android:
      1. Description: Enable user to look up to their post history.
      2. Work time: 8 hrs
      3. Member: Dingzhe Li

Complete: On user profile page, there are links to all the posts and responses that sent by the user.

1. As an user, I want to give a feedback to provider/requester when the service is completed.
   1. Android:
      1. Description: Enable user to rate and give feedback to the provider/requester when the service is completed
      2. Work time: 10 hrs
      3. Member: Hanchen Li

Complete: After the post owner has chosen an offer, who made that offer is able to rate the post owner. And he can choose to rate the post owner zero to five stars.

1. As an user, I want to find out the location in a map view when I opened the post detail page.
   1. Android:
      1. Description: Adding a map to the post detail page.
      2. Work time: 5 hrs
      3. Member: Zheng Chen

Complete: In the post detail page, there is a google map embedded in it. And it will show the location information.

1. As an user, I would like to have a sidebar which will contains filters in it.
   1. Android:
      1. Description: Adding functionalities to the sidebar.
      2. Work time: 15 hrs
      3. Member: Yuying Wang

Complete: By right sliding under the main page, users can see the sidebar with filters in it. And by using that, they are able to filter out specific posts.

**Non-Functional Requirements:**

1. As an user, I would like to have a better styling of this whole project.
   1. Android:
      1. Description: Making this application looks prettier.
      2. Work time: 5 hrs
      3. Memeber: Yuying Wang

Complete: After review a considerable number of popular applications and websites, color scheme is setup by grabbing the idea of modern design and balanced visual feeling. The outcome is to make sure the users can observe the most important and wanted components at the very beginning, meanwhile keeping the whole interface visually appealing.

1. As an user, I would like to have a quicker responding time when searching for requests.
   1. Android:
      1. Description: Redesign the searching algorithm
      2. Work time: 5 hrs
      3. Member: Yuying Wang

Complete: The search result can show as we enter the keywords. There is no noticeable delay at all.

**2. What did not go well:**

**(a) Include general retrospective review for this sprint.**

In sprint 3, we are able to complete almost all the tasks and user stories for the IOS and Android client. However, there are some functions such as chat are too hard to implement for us. Because of limitation of human resource and time, we did not finish every function in our plan.

**(b) Ensure to list ALL unsuccessful user stories and tasks with detailed discussions.**

**iOS:**

1. As a carpool provider/requester, I would like to initiate a chat with an existing service requester/provider by clicking the item.

Partially working: We initially develop this feature on an independent app, where most of the frameworks and libraries are pre-installed. However, it was extremely hard to add those frameworks and libraries by hand to another app. So we spent significantly amount of time on trying to do that. But still, did not find a good way to complete it. So the chat module is working on it’s own module, but we are unable to combine this chat module with the rest of the feature.

1. As a service requester, I would like to chat, which supports sending images, with the provider to a service by clicking the item.

Partially working: Our independent chat module, which utilize Parse API, is able to support send images with other users. However, these features do require other framework that need to be pre-installed to the app. However, the framework is not compatible with the Swift version we use for our app.

**Server:**

1. As an user, I would like to have a map view on services requested/provided nearby.
   * 1. Description: Adding the location sorting functionality to our server.
     2. Work time: 15 hrs
     3. Member: Hanchen Li

Partially working: Currently we use calculate every time we received a request. It is working in small scale but it can take a long time when we are dealing with millions of requests, which is not acceptable.

**3. Future Improvement:**

(a) Mention at least two ways to improve your work in the next sprint and be as detailed as you can in 2-5 sentences.

1. Since this application involves various interdependent features across different platforms, more thorough testings need to be conducted to make sure every function is working well. (Yuying Wang)
2. Since this is a cross platform product, different platform may apply different methods to achieve the same goal. We should arrange more cross-platform meetings to discuss about the details of some key operation (e.g., the encoding method and parameter using to convert a picture) in order to make sure data uploaded from different platform are consistent. (Tianyang Yu, Hanchen Li)
3. Since the Swift updating extremely fast, so APIs will be limited if we choose the latest version of the development language. So we should do more researches on all the APIs beforehand. Then choose the mature version of the software developing language. In this way, we would eliminate the compatibility issues, between existing APIs and our app, as many as possible. (Zhicheng Zhou)
4. Develop new data structures and algorithms to store location data so that we can do distance calculation instantly. (Dingzhe Li, Zheng Chen)