

# **University Discourse**

CS 30700 (Spring 2020)

Team 1

### **Sprint 2 Planning Document**

Drishti Agarwala Mohana Chandiran Dhukkaram Tae Yoon Kim Rewati Shitole

**Sprint Overview:** During this sprint, we aim to integrate the features for this sprint into the foundation that we have built in the last sprint. While we work on providing the above-mentioned functionality, we would also develop effective test cases to test our features for correctness.

Scrum Master: Tae Yoon Kim

Meeting Schedule: Mondays @ 12:30 - 1:30 / Thursdays @ 12:00 - 1:30

Risks and Challenges: The biggest challenge for us is that most of our user stories are interlinked in some way or the other. Different members working on linked user stories will require us to define a timeline since the implementation of one user story will be based on the completion of another user story. In addition, the functionalities that we are implementing in this sprint are much more complex and will require more thinking in terms of algorithms and logic compared to the earlier sprint.

### Color update of like, upvote, downvote Optimize code/ speed of the increments Check the error messages

User Story #1: As a user, I want to be able to report inappropriate content.

#	Description	E.T.	Owner
1	Create the React dropdown UI component for selecting the option of reporting.	3 hrs	Rewati Shitole
2	Create method to handle requests for reporting inappropriate content(Backend).	2 hrs	Rewati Shitole
3	Create a method to send requests to the server to increase report count.	2 hrs	Rewati Shitole
4	Create method to display server response to UI if the post is deleted.	2 hrs	Rewati Shitole
5	Create a method to verify a user, so that they are not allowed to report a post twice.	2 hrs	Rewati Shitole
6	Create a method to delete the post once the report count has crossed the set limit.	1 hr	Rewati Shitole
7	Debug and test methods using unit tests.	3 hrs	Rewati Shitole

- Given that the method which queries the database for retrieving the report count is implemented correctly, when the user reports a post, then the updated report count should be stored in the database.
- Given that the report count is updated successfully in the database, when the user attempts to report a post, then the UI should change appropriately to display that the report has been successfully registered.
- Given that the method to verify that the user has reported the post earlier is working correctly, when the user attempts to report a post again, then the UI should change to display an appropriate error message.
- Given that the method to compare the report count to the set limit is working correctly, when the user reports the post such that the report count reaches the limit, then the UI should change to not include the post.

 Given that the method to compare the report count to the set limit is working correctly, when the user reports the post such that the report count reaches the limit, then the post should be deleted from the database.

User Story #2: As a registered user, I want to be able to like/upvote/downvote the posts, I also want to be able to like/upvote/downvote comments.

#	Description	E.T.	Owner
1	Create the React UI component for implementing the like, upvote, downvote feature.	2 hrs	Rewati Shitole
2	Create method to handle requests for liking, upvoting, downvoting posts and comments (Backend).	1 hr	Rewati Shitole
3	Create a method to send requests to the server to increase like, upvote downvote count.	2 hrs	Rewati Shitole
4	Create a method to verify a user, so that they are not allowed to like, upvote or downvote a post or comment twice.	3 hrs	Rewati Shitole
5	Create method to display server response to UI if the user likes, upvotes, downvotes a post or comment.	2 hrs	Rewati Shitole
6	Debug and test methods using unit tests.	3 hr	Rewati Shitole

- Given that the method which queries the database for retrieving the like, upvote, downvote count is implemented correctly, when the user does any of the above actions, then the updated count should be stored in the database.
- Given that the like/upvotes/downvote count is updated successfully in the database, when the user does any of the above actions, then the UI should change appropriately to display the change.
- Given that the method to verify that the user has liked/upvoted/downvoted the post earlier is working correctly, when the user attempts to do the same action again, then the UI should change to display an appropriate error message.

 Given that the method to verify that the user has liked/upvoted/downvoted the comment earlier is working correctly, when the user attempts to do the same action again, then the UI should change to display an appropriate error message.

User Story #3: As an unregistered/registered user, I want to be able to view the semester schedule on the calendar interactively

#	Description	E.T.	Owner
1	Create the React UI component for displaying the semester schedule on the main feed page.	2 hrs	Rewati Shitole
2	Create method to display the calendar post to UI on the main feed page with information from the database	2 hrs	Rewati Shitole
3	Create a method to have a unique URL for every course page	2 hrs	Rewati Shitole
4	Create a method to redirect to the course page when the tag button with the name of the course in the calendar post is clicked	2 hrs	Rewati Shitole
5	Store mock data on the database that will be used to create the course pages	1 hr	Rewati Shitole
6	Debug and test methods using unit tests.	3 hrs	Rewati Shitole

- Given that the method that takes the calendar data from the database is implemented correctly, then the buttons on the calendar post in the main feed page should have the respective course names as stored in the database via the calendar post.
- Given that the method that creates a unique URL for the course pages is implemented correctly, then each course should have a unique course page route.
- Given that the method that redirects the user to the specific course pages is implemented correctly, when the user clicks on the tag button, then they should be able to be redirected to that course's page.
- Given that the method that renders the calendar post on the main feed page

is implemented correctly, when any user loads their feed, then the post should be there on their feed if they follow any of those courses(tags) mentioned in the calendar.

# User Story #4: As a registered user, I want to be able to select a tags for the post using a tag box

#	Description	E.T.	Owner
1	Create the React UI component for implementing the Tag Box on the Create Post Page	2 hrs	Drishti Agarwala
2	Create the React UI component to be able to delete a tag by clicking on the cross button	2 hrs	Drishti Agarwala
3	Create the method to be able to view the suggested tags when the user clicks on the tag box	2 hrs	Drishti Agarwala
4	Create method to handle the make post request by the user	2 hrs	Drishti Agarwala
5	Create a method that requires the user to select at least one tag that they follow	2 hrs	Drishti Agarwala
6	Debug and test methods using unit tests.	3 hrs	Drishti Agarwala

- Given that the method that redirects the user to the main feed page is implemented correctly, when the user is redirected to the Create Post Page they should be able to view a tag box.
- Given that the method that renders the tag box is implemented correctly, when the user clicks on the field to type they should view a list of topics that they follow as suggested tags
- Given that the method that adds the tags to the tag box is implemented correctly, when the user clicks on the cross sign in front of an added tag, they should be able to delete that tag from the tag list
- Given that the method to retrieve the tags that the user follows from the database is implemented correctly, when the user submits the post they should be required to have at least one tag that they follow

 Given that the method to retrieve all the tags from the database is implemented correctly when the user adds tags to the tagbox the user should be able to add only the tags that exist in the database

## User Story #5: As a registered user, I want to be able to share the posts as embeddable links

#	Description	E.T.	Owner
1	Create the React UI component for implementing the share feature	1 hr	Drishti Agarwala
2	Create a method to route every post to a different link	2 hrs	Drishti Agarwala
3	Create a method to make the link an embedded link	2 hrs	Drishti Agarwala
4	Create a method to get a facebook share button for all posts	3 hrs	Drishti Agarwala
5	Create a method to allow the user to share the post to facebook using the post link	3 hrs	Drishti Agarwala
6	Debug and test methods using unit tests.	2 hrs	Drishti Agarwala

- Given that the method to render the share button is implemented correctly, when the user views all the posts on their feed, they should be able to see a button to share the post to facebook
- Given that the method to share the post link to facebook is implemented correctly, when the user clicks on the share button they should be redirected to a facebook page
- Given that the method to create embeddable link is implemented correctly, when the user pastes the post URL to any app that supports embedded links the user should be able to view the embedded content
- Given that the method to generate a link for the post is implemented correctly, the route for every post should be unique.

## User Story #6: As a user I should be able to view the post separately when on another page

#	Description	E.T.	Owner
1	Create the React UI component for viewing the post individually	2 hr	Drishti Agarwala
2	Create a method to redirect from the main feed page to an individual post page when the user clicks on the post title	1 hrs	Drishti Agarwala
3	Create a method to redirect every post to a different route	2 hrs	Drishti Agarwala
4	Create a method to retrieve the post data from the database and display it on the individual post page as required	2 hr	Drishti Agarwala
5	Debug and test methods using unit tests.	3 hr	Drishti Agarwala

- Given that the methods to render the post on the main feed page are implemented correctly, when the user clicks on the post title they should be redirected to the individual post page
- Given that the methods to retrieve post data from the database are implemented correctly, when the user is redirected to the post page, they should be able to view the most up to date content of the post
- Given that the methods that display the UI are implemented correctly, when the user is redirected to the page they should be able to view the post information and the comments in a proper format(Comments below the post)
- Given that the method to generate a different route for every post is implemented correctly, when the user clicks on the title they should be redirected to an individual post page which consists of the post id in it's route to make every route unique.

### User Story #7: As a registered user, I want to be able to follow topics

#	Description	E.T.	Owner
1	Make tags in the post to be clickable and when the user clicks, make it should show a prompt to the user	2 hrs	Tae Yoon
2	Upon acceptance, update the tags shown in the sidebar accordingly	1 hr	Tae Yoon
3	Create a method to send a request to the server for updating the user's tag list	2 hrs	Tae Yoon
4	Create a method in the server to query the database	2 hrs	Tae Yoon
5	Create a method to modify the state of the sidebar accordingly	2 hrs	Tae Yoon

- Given that the UI is implemented correctly, when a user clicks on a tag on the post, the user should be given a prompt whether the user wants to follow the tag.
- Given that the methods are implemented correctly, if the user accepts the prompt, the newly added tag should be shown on the sidebar.
- Given that the methods are implemented correctly, if the user accepts the prompt, the client should send a request to the server to update the user's tag list.
- Given that the methods are implemented correctly, if the server gets a request to update the tag list in the database, the server should send a request to the database.
- Given that the methods are implemented correctly, if the user tries to follow a tag that the user is already following, the user should be notified with a warning.

## User Story #8: As a registered user, I want to be able to input my scores and past semester curves for a course

#	Description	E.T.	Owner
1	Modify the action bar to also allow the user to input scores and past semester curves for a course	3 hrs	Tae Yoon
2	Create a React Component for the grade and curve input page. If the user has chosen the grade option, the user should indicate the score. If the user has chosen the curve option, the user should give the grade range as input.	3 hrs	Tae Yoon
3	Create a method to check the input	1 hr	Tae Yoon
4	Create a method to send a request to the server to create a new post with a type of grade / curve	2 hrs	Tae Yoon
5	Create a method to send a query to store the data in the correct collection	2 hrs	Tae Yoon

- Given that the UI and redirection is implemented correctly, when the user clicks on the input score / grade button, they should be redirected to a page unique for inputting grades / curves.
- Given that the methods are implemented correctly, when a user clicks submit, check if every field has been entered in correct format.
- Given that the methods are implemented correctly, when a user clicks submit
  and the inputs are valid, a request should be sent to the server to add new
  data to the certain course.
- Given that the methods are implemented correctly, when the server gets a request, the server should query the database to modify/add a document.

## User Story #9: As an unregistered/registered user, I want to be able to view a graphical representation of the estimated curve

#	Description	E.T.	Owner
1	Implement UI for redirecting the user to the appropriate course page	2 hrs	Tae Yoon
2	Implement a basic React page component for the course	2 hrs	Tae Yoon
3	Create a method to get the data from the database about the certain course	2 hrs	Tae Yoon
4	Create a method to parse the data retrieved from the database about the course and format it into something usable for the graph creating API	2 hrs	Tae Yoon
5	Utilize the graph API to create the visual graph of the grade distribution of the course	4 hrs	Tae Yoon

- Given that the UI is implemented correctly, when a user clicks on a button to see the grade graph of the course, the user should be given an option to input which course to see.
- Given that the methods are implemented correctly, once the user chooses the course they wish to view, the user should be redirected to a page displaying the graph.
- Given that the methods are implemented correctly, when a request for the course grade information is sent to the server, the server should query the database.
- Given that the methods are implemented correctly, when a request has been successful, the client should receive the response and be able to parse it for the graph API.
- Given that the methods are implemented correctly, when the data is parsed, the graph should show the cumulative curve of the past semesters.

## User Story #10: As a registered user, I want to be able to post schedule in a calendar asking for feedback

#	Description	E.T.	Owner
1	Create React components for the calendar UI form and a button in the action bar	2 hrs	Chandiran Dhukkaram
2	Create method to send request to server with user details and courses that the user selected	2 hrs	Chandiran Dhukkaram
3	Create method to handle calendar creation request from the client	2 hrs	Chandiran Dhukkaram
4	Create method for the server to request the database for storing new calendar post	2 hrs	Chandiran Dhukkaram
5	Create method to display server response to UI	2 hrs	Chandiran Dhukkaram
6	Debug and test methods using unit tests	3 hrs	Chandiran Dhukkaram

- Given that the appropriate UI is displayed, when the user selects one of the create post options, then the user should be able to choose the calendar option and input the course details for the post.
- Given that the methods that check for the correctness of the fields are implemented correctly, when the user does not fill in the appropriate fields for the post, then the UI should display an error.
- Given that the methods that send the request to the server in the case of a correct form are implemented correctly, when the user clicks submit, then an appropriate request to the server should be made.
- Given that the methods that add posts to the database are implemented correctly, when the user submits the post, then the server should generate the appropriate query command to push the data to the database.
- Given that the methods on the server are implemented correctly, when the post has actually been created in the database, then the user is redirected to the Main feed page.

User Story #11: As a registered user, I want to be able to comment on posts

#	Description	E.T.	Owner
1	Create React components for the UI for allowing the comment feature.	2 hrs	Chandiran Dhukkara m
2	Create method to handle requests for commenting(Backend).	2 hrs	Chandiran Dhukkara m
3	Create a method to store the comment in the database, so that it can be stored in association with the user.	2 hrs	Chandiran Dhukkara m
4	Create a method to display server response to UI if the the server successfully stored the comment in the database.	2 hrs	Chandiran Dhukkara m
5	Debug and test methods using unit tests.	2 hrs	Chandiran Dhukkara m

- Given that the UI component for the option of commenting is implemented correctly, the user should be able to use the comment form to make a comment.
- Given that the method which queries the database to store the comment is implemented correctly, when the user comments on a post, then the comment should be stored in the database along with the associated user.
- Given that the comment is stored in the database successfully, when the user has commented, then the UI should change appropriately to display comment underneath the post.
- Given that the UI component is implemented correctly, when the user comments, his username and the time of commenting should get displayed as well.

### User Story #12: As a registered user, I want to be able to edit/delete a comment

#	Description	E.T.	Owner
1	Create React components for the UI for allowing the editing/deleting comment feature.	2 hrs	Chandiran Dhukkara m
2	Create method to handle requests for editing comments(Backend).	1 hr	Chandiran Dhukkara m
3	Create a method to update the comment in the database, or delete it as required by the user.	2 hrs	Chandiran Dhukkara m
4	Create a method to display server response to UI if the the server successfully stored the edited comment in the database.	2 hrs	Chandiran Dhukkara m
5	Create a method to verify a user, so that they are not allowed to edit or delete another user's comment.	2 hrs	Chandiran Dhukkara m
6	Debug and test methods using unit tests.	4 hrs	Chandiran Dhukkara m

- Given that the method which queries the database for retrieving the associated comment is implemented correctly, when the user edits a comment, then the updated comment should be stored in the database.
- Given that the method which queries the database for retrieving the associated comment is implemented correctly, when the user deletes a comment, then the comment should be removed from the database.
- Given that the method to verify that the user who is editing the comment is its author as well is working correctly, when a user who is not the author of the

- comment attempts to edit/delete the comment, then the UI should change to display an appropriate error message.
- Given that the comment is updated successfully in the database, after the user has updated his comment, then the UI should change appropriately to display the updated comment.
- Given that the comment is deleted successfully from the database, after the user has deleted his comment, then the UI should change appropriately to display the feed without the comment.

### **Product Backlog**

### **Functional Requirements:**

Serial No.	Backlog Item
1	As a user, I want to be able to create an account
2	As a registered user, I want to be able to login to my account
3	As a registered user, I want to be able to change my email
4	As a registered user, I want to be able to change my password
5	As a registered user, I want to be able to recover my password
6	As a registered user, I want to be able to logout of my account
7	As a registered user, I want to be able to delete my account
8	As a moderator, I want to be able to edit the topic associated with the post
9	As a user, I want to be able to report inappropriate content
10	As an unregistered/registered user, I want to be able to search for topics
11	As an unregistered/registered user, I want to be able to filter searches based on university, subject and courses
12	As an unregistered/registered user, I want to be able to view all information which includes posts, comments, course ratings, curve estimations
13	As an unregistered/registered user, I want to be able to view a graphical representation of the estimated curve
14	As an unregistered/registered user, I want to be able to view the plan of studies on the calendar interactively / semester schedules
15	As a registered user, I want to be able to follow topics
<del>16</del>	As a registered user, I want to be able to view posts on the feed based on the topics I follow
<del>17</del>	As a user, I want to be able to select between the various options of the post when creating a new post
<del>18</del>	As a registered user, I want to be able to post images

<del>19</del>	As a registered user, I want to be able to post text
20	As a registered user, I want to be able to post schedule in a calendar asking for feedback
21	As a registered user, I want to be able to comment on posts
22	As a registered user, I want to be able to like the posts, I want to be able to upvote/downvote the posts, I also want to be able to like/upvote/downvote comments.
23	As a registered user, I want to be able to share the posts as embeddable links
24	As a registered user, I want to be able to upload documents relating to a course
25	As a registered user, I want to be able to input my scores and past semester curves for a course
26	As a registered user, I want to be able to rate the course based on difficulty and professor
27	As a registered user, I want to be able to select a tags for the post using a tag box
28	If time allows, as a user, I want to be able to have two-factor authentication
<del>29</del>	As a registered user, I want to be able to edit a post
30	As a registered user, I want to be able to edit/delete a comment
31	If time allows, as a moderator, I want to be able to delete inappropriate content
32	If time allows, as a first time user, I want to be able to view top posts (trending posts) in my initial feed.
33	If time allows, as an unregistered/registered user I want to be able to view recommended posts in my feed/explore feature based on my previous activity
34	As a user I should be able to view course information about all the courses in the university catalog.
35	As a user I should be able to share the post by getting the shareable URL link of the post
36	As a user I should be able to view the post separately when on another page

### **Non Functional Requirements:**

- (1) Must be able to use this application on desktop browsers
- (2) If time allows, users must be able to use this application on mobile web browsers
- (3) The UI must be easy to understand and navigate for the users
- (4) The database must be easy to maintain and efficient to extract, update or delete data from
- (5) Our app must be able to host enough simultaneous users