Product Backlog

FIT2101 - Team Terang Bulan

Overview

A web-based application (accessible for multiple devices) for students and teachers to track student's contribution to the project. This app will not show any notifications, just purely to show whoever's viewing the app who has done how much work.

A teacher's account privileges:
- Create new projects and set a due date for the projects
- Assigns students to the project

A student's account privileges:
- See the projects that are pre-assigned by the teacher
- Manually input their tasks (has an estimated time of completion) and their contribution to the task

As we are using an agile approach to this product development, agile will always prioritize collaboration over exhaustive documentation. Therefore, client's requirements will be our primary focus in this project. After several discussions with clients and considerations, our team have carefully listed out user stories that represent our whole system:

User Stories

1. As a teacher, I want to be able to create new projects and set a due date so that I can see the team and their progress. (Story points: M)

2. As a teacher, I want to log in and land on the teacher account page. (Story points: M)

3. As a student, I want to be able to create an account (sign up) for the system, so that I can use the system. (Story points: M)

4. As a student, I want to be able to sign in to a student account, so that I can use the system. (Story points: M)

5. As a student, after I logged in I want to be able to see the list of projects that I have at the current time. (Story points: M)

6. As a student, I want to be able to input my progress and task contribution of a project to the app, therefore I can track the allocation of tasks between my team members and the teacher can view our progress and task allocations. (Story points: XL)

7. As a teacher, I want to be able to check the work distribution per task of each team member in a project, therefore I can have additional judgment on their mark based on their work allocation. (Story points: L)

8. As a teacher, I want to be able to assign students to the project so that they can start contributing to the project without the need to manually join by themselves (Story points: L)

9. As a user, I want to be able to see my profile information and manage it.(Story points: S)

10. As a teacher, I want to be able to see the detailed activity done for each student, so in the whole project so that I know why a student is tardy for a task. (Story points: L)

11. As a teacher, I want to be able to see all the projects I made, so that I can monitor the projects. (Story points: M)

12. As a user, I want to have a good UI design so that I can have good user experience. (Story points: L)

13. As a student, I can add tasks into the project, so that I can monitor the task inside the project. (Story points: M)

14. As a student, I can assign team members against the tasks so that everyone can add their contribution. (Story points: S)

Priority	Product Backlog Item	User Story #	User Story	Story Point
1	Sign Up Page (Student)	3	As a student, I want to be able to create an account (sign up) for the system, so that I can use the system.	M
2	Sign In Page (Student)	4	As a student, I want to be able to sign in to a student account, so that I can use the system.	M
3	Sign In Page (Teacher)	2	As a teacher, I want to log in and land on the teacher account page.	M
4	*Student Landing Page*	*5*	*As a student, after I logged in I want to be able to see the list of projects that I have at the current time.*	*M*
5	*Teacher Landing Page*	*11*	*As a teacher, I want to be able to see all the projects I made, so that I can monitor the projects.*	*M*

6	Create New Projects	1	As a teacher, I want to be able to create new projects and see the team for that project.	M
7	Assign student to a Project	8	As a teacher, I want to be able to assign students to the project so that they can start contributing to the project without the need to manually join by themselves	L
8	Create New Tasks	13	As a student, I can add tasks into the project, so that I can monitor the task inside the project	M
9	Assign teammate to a Task	14	As a student, I can assign team members against the tasks so that everyone can add their contribution.	S
10	Task Allocation Page	7	As a teacher, I want to be able to check the work distribution per task of each team member in a project, therefore I can have additional judgment on their mark based on their work allocation.	L
11	Add Task Contribution	6	As a student, I want to be able to input my progress and task contribution of a project to the app, therefore I can track the allocation of tasks between my team members and the teacher can view our progress and task allocations.	XL
12	Better UI Design	12	As a user, I want to have a good UI design so that I can have good user experience.	L
13	Task Detail Page	10	As a teacher, I want to be able to see the detailed activity done for each student, so in the whole project so that I know why a student is tardy for a task.	L

Story Points have been discussed using Planning-Poker to estimate the portion of each user story. This will help us avoid morale-sapping arguments and get around cognitive biases as this technique is fair and unbiased.

Developer Stories

1. As a developer, we want the software to be accessible from desktop and mobile, so that users can access it anytime and anywhere. (Story Points: L)
2. As a developer, we want to create a user database so that users can sign up and login through the application.(Story Points: L)
3. As a developer, we will not use any front-end framework so that we can focus more on the back-end and database improvements(Story Points: S)

4. As a developer, we want to create graph visualization to provide users the overall progression they have made for projects.(Story Points: L)
5. As a developer, we want to make sure that users need to login before going to the home page to prevent unsynchronized databases.(Story Points: M)
6. As a developer, we want to make the teacher's account have special visibility, where that account can view and manage students projects while the student's account will not have that visibility.(Story Points: XL)
7. As a developer, I want to be able to see my profile information and manage it. (Story Points: S)

Priority	Product Backlog Item	Dev Story #	Developer Story	Story Point
1	-	1	As a developer, we want the software to be accessible from desktop and mobile, so that users can access it anytime and anywhere	L
2	-	3	As a developer, we will not use any front-end framework so that we can focus more on the back-end and database improvements	S
3	Database creation	2	As a developer, we want to create a user database so that users can sign up and login through the application	L
4	Signup and Signin Page	5	As a developer, we want to make sure that users need to login before going to the home page to prevent unsynchronized databases	M
5	Account Page	7	As a developer, I want to be able to see my profile information and manage it.	S
6	*Project Info Page & Task Info Page*	*4*	*As a developer, we want to create graph visualization to provide users the overall progression they have made for projects*	L
7	*Create Project, Assign Student in Project Creation*	*6*	*As a developer, we want to make the teacher's account have special visibility, where that account can view and manage students projects while the student's account will not have that visibility*	XL

Spike Stories

There are no spike stories at the moment in Sprint Review 1 and Sprint Review 2.

Product Backlog Item

To conclude the whole project, we can divide it into several item points according to our user stories and client's requirements (i.e. description of user stories). These items below are not unmodifiable, these items are fluid and can be modified, extended or deleted to any circumstance in the future.

1.   Sign Up Page

In this page, the user is asked for several data in order to create an account for TERBUL TRACKER. After the user has done filling up required data, it will be stored in our database so that user will be able to login.

2.   Sign In Page

Allow users to login to their account by entering id and password, which will be validated and retrieved from our database. If users have not created an account, there will be a link to sign up page and let users create an account.

3.   Home Page

After logging in, the user will arrive at this page. This page is our main page, where users can access profile settings, projects library and project overview. This page might be slightly different between student's account and teacher's account.

a.   Profile Settings

This feature will let users to view and change profiles such as First Name, Last Name and also email.

b.   Projects Library

This will be labelled as My Projects. It displays all the projects that are ongoing. Each box will represent a project, where the superviser, deadline and number of members are also attached to the box.

c.   Project Overview

For each box as mentioned above, it can be clicked to give an overview of the particular project. This overview will consist of task completion and contribution both displayed as graphs and percentages.

4.   Project Creation Page

This page is restricted to the teacher's account. Teacher will be creating projects and assigned students to them. This page will ask for the project's name, its deadline and also the list of students to be assigned to this project.

5.   Project Detail and Description Page

This page will be our main focus as it is the most crucial feature of our project. Task details, task progression, student's contribution are all shown here. It will be displayed as graphs / charts, and each student will be shown in different colours.

a.   Task Contribution Input

Student account layout would have this feature, as students are required to input their task contribution for their assigned projects. Students will be asked to input the number of hours they took to complete tasks.

b.   Task Creation

This feature is also only visible in student account layout. Students will generate tasks for a project including its time estimation of completion and also its description.

More information and our prototype layout are shown here:
https://docs.google.com/presentation/d/1xWYnYDqmscc_o8dla47Y0GdBIm_C3W_6SeYykgoWZpA/edit#slide=id.p

More Information on our sprint review(s) and user stories
https://trello.com/b/xFU7KLWJ/fit2101