

PROJECT MANAGEMENT TOOL



COLLABORATION
TOOLS FOR PEOPLE TO
WORK VIRTUALLY

TEAM 1 : AVENGERS ASSEMBLE

Meet the Team Members and know their Roles

Akhila Katukuri

Frontend Developer | UI Designer



Sai Jeevan Teegala

Python/Backend Developer
Product Owner



Vikas Sanhotra

Backend Engineer, Technical Writer



Claudia Dsilva

Frontend Developer | Technical Writer
Scrum Master



Vamshi Krishna

Full Stack Developer | Lead Developer

Agenda

- Introduction to the Topic and other details
- Personas
- Technologies used
- Process and Flow Diagrams
- Product Backlog overview
- Sprints Recap (1-7)
- Sprint 8
- User Stories and Acceptance Criteria
- Test cases for sprint 8
- Burndown chart for Sprint 8
- Future Scope
- Retrospective
- Demo

What is Project Management Tool?



- An aid to assist an individual, team or organization to effectively organize work, projects and tasks.
- Made completely customizable so they can fit the needs of teams of different sizes and with different goals.
- Comprised of modules like Project and Task assignment and tracking, calendar management, chat box, file storage functionality and session management for effective planning, estimating and tracking team progress and collaboration and communication within the team.
- Allows you to create, implement, and manage efficient and optimized processes for all areas of team and helps in estimating, planning, tracking the project.

What are the Features of Project Management Tool?

- **Project and Tasks:** So that the manager can add new projects and assign tasks to the team members.
- **Dashboard:** So that the team members can see the projects and task assigned to them along with other modules.
- **Calendar:** So that the team members keep track of deadlines and set priorities.
- **Chat function:** So that team members, manager and client can interact with each other.
- **Repository:** So that users can share/upload/download documents.
- **FAQ page:** So that the team members knows the basic solutions to common issues.
- **Settings page:** For additional profile settings.

Uses of Project Management Tool:



This tool can be used for:

- Project planning
- Project scheduling
- Resource allocation & Capacity planning
- Storing & sharing documentation and project records
- Communication & Collaboration within team
- Analysing performance of team

PERSONAS



**ADAM
REYNOLDS**

Manager

Age :30, Married

Goals:

He wants to have a 24*7 overview of the project and the status of the team for effective management.

Frustrations:

Not able to get a clear answer for effective tracking the team's progress

Technology:

Software Development , Java

MANAGER:

- has ultimate control over teams and projects.
- gets to create and allocate tasks to the team members.
- creates custom roles and grant access levels to the team members.
- gets to keep an eye on the task status of team members.
- has access to repository , chat box and other functions

Personas

TEAM MEMBER:

- can see the work allocated to them along with deadlines.
- can change the status of the task assigned on completion.
- has access to repository , chat box and other functions



Marie Stan

Software Engineer

Age :25, Single

Goals:

She wants to learn frontend.

She wants to start her own business in the future.

Frustrations:

Data crashes.

Poor Communication.

Technology:

Software Consultant, Java

Personas



Cris Mas

Client, Business Owner

Age :45, Single

Goals:

He wants interesting software for his product.

He wants to save time online.

Frustrations:

It takes too much time to track progress.

Technology:

CRM

CLIENT:

- can see the work allocated to the members along with deadlines.
- can be able to check the progress of the project.

Technologies Used

Technologies Used

Front-end

UI/UX Designs

REACTJS

Router

Components

Service

JSON files

Back-end

DJANGO

REST API
FRAMEWORKS

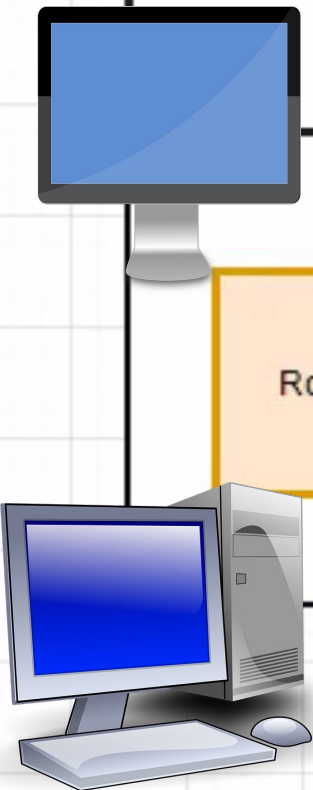
URL
Patterns

Views

Serializers

Models

SQLite



Frontend Details

React is library for creating frontend for creating user interfaces. Avoid expensive DOM operations, update elements offline before inserting into the DOM.

Components are created using HTML, CSS, JS.

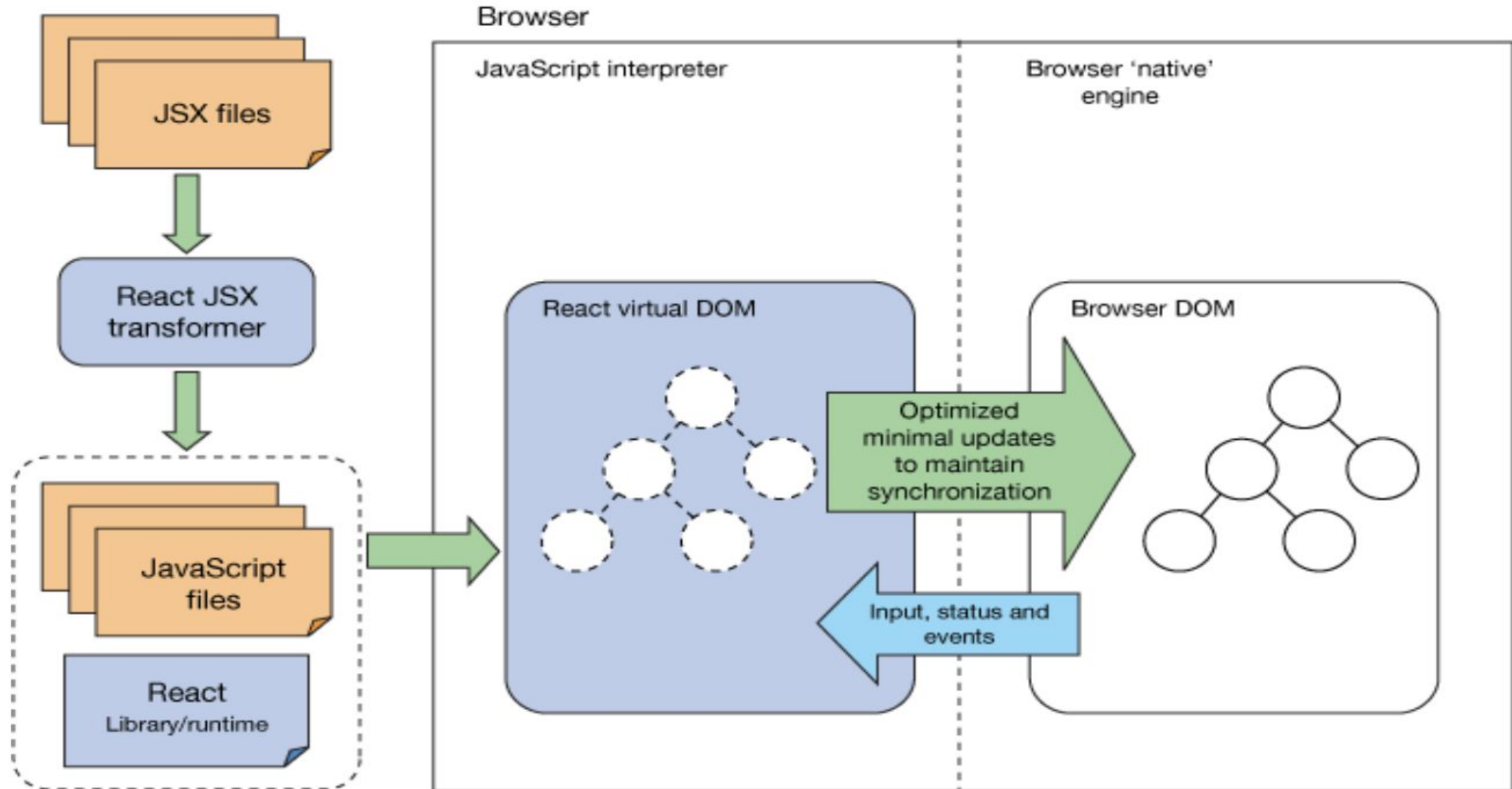
React creates an in-memory data structure cache, computes the resulting differences, and then updates the browser's displayed DOM efficiently.

Component rendering: value returned from render() method is not a DOM node. lightweight description of UI. diffed with current description to perform the min set of changes.

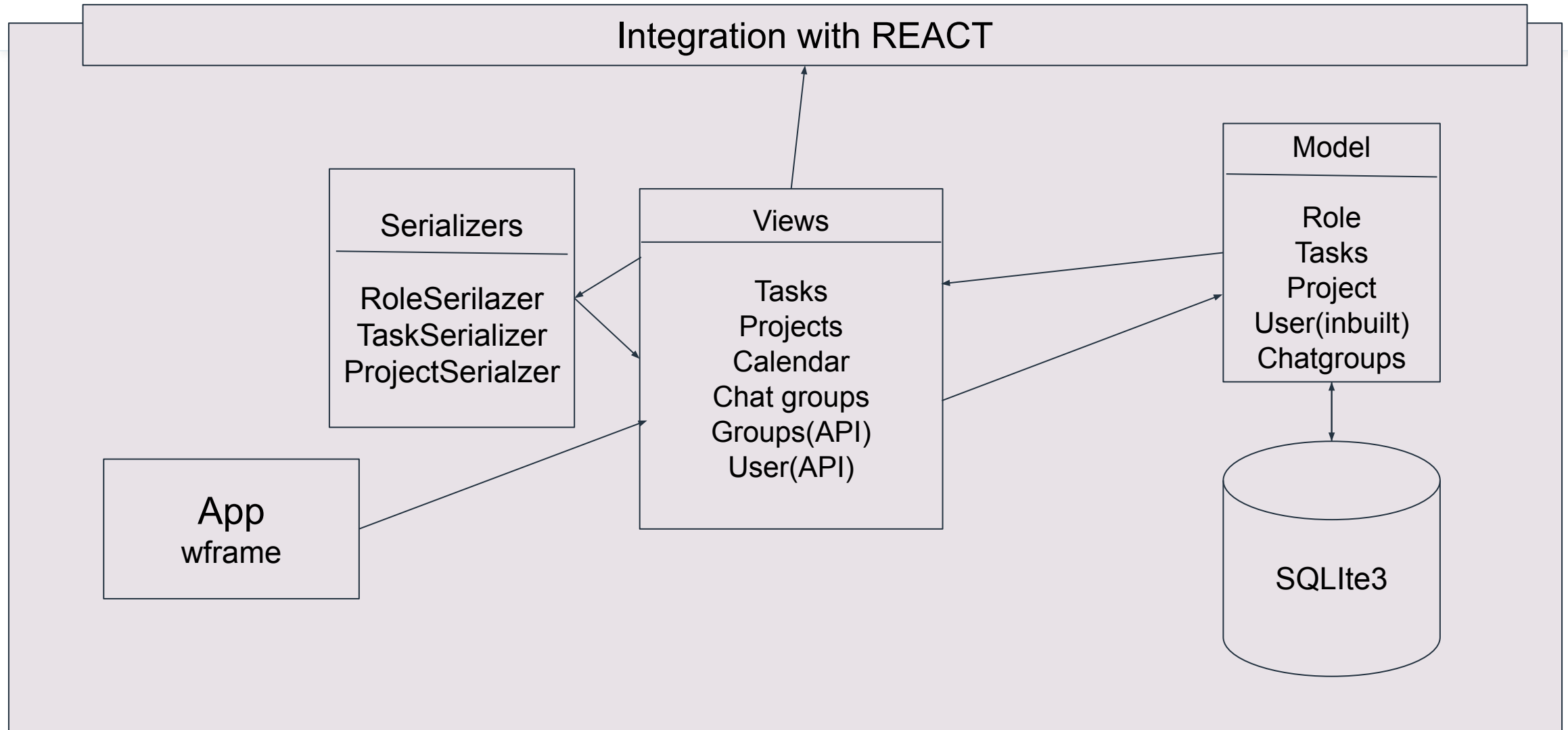
Data Flow: Immutable properties passed to children by parent are accessible in **this.props** and vice versa.

State object: 1) Like properties, state affects how a component behaves and renders. Unlike properties, there's no way to define what state should be applied to components via JSX. 2) Properties are defined when components are created whether by JSX or by pure JavaScript. State, on the other hand, is only seen on the inside of component definitions.

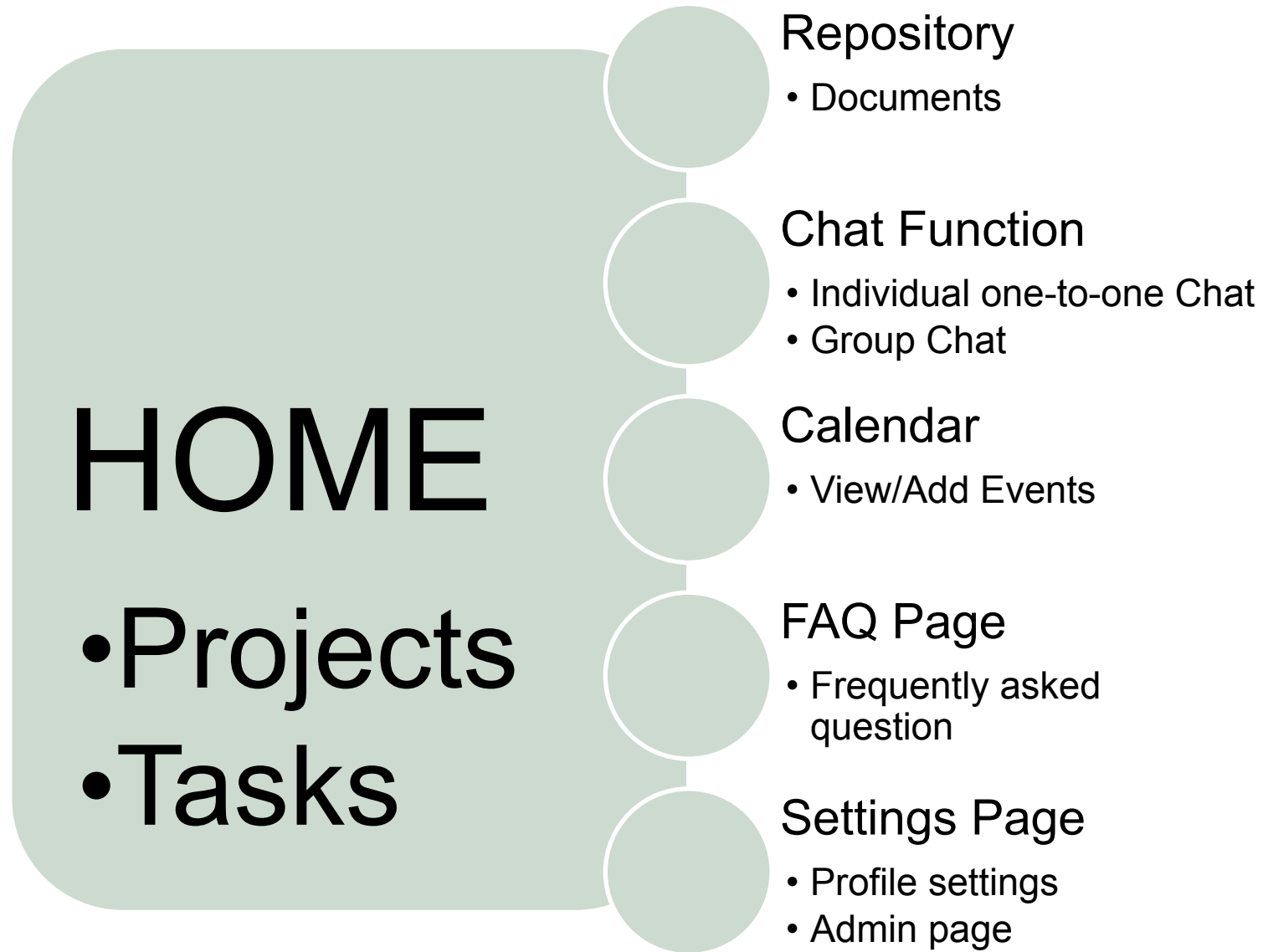
React Architecture



Backend Details

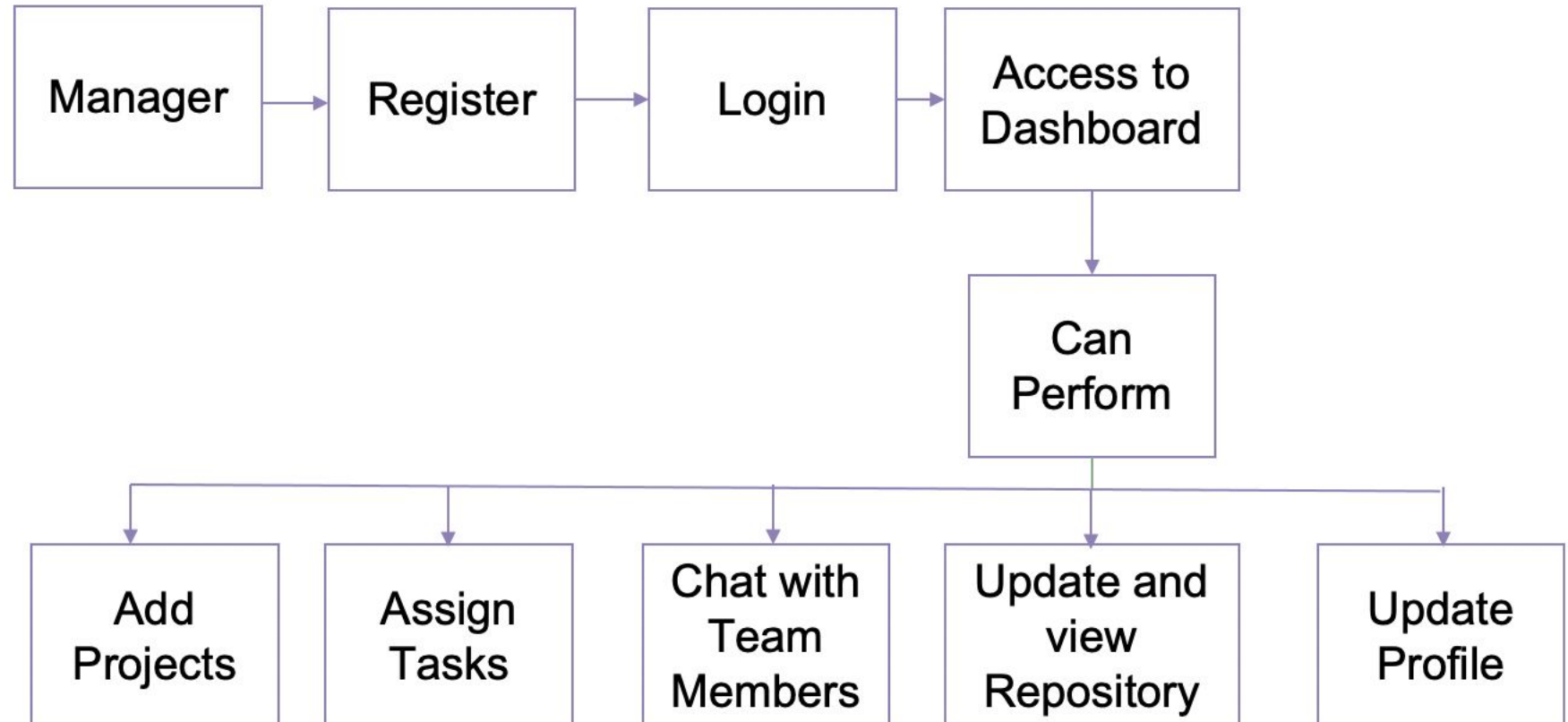


Process Diagram:



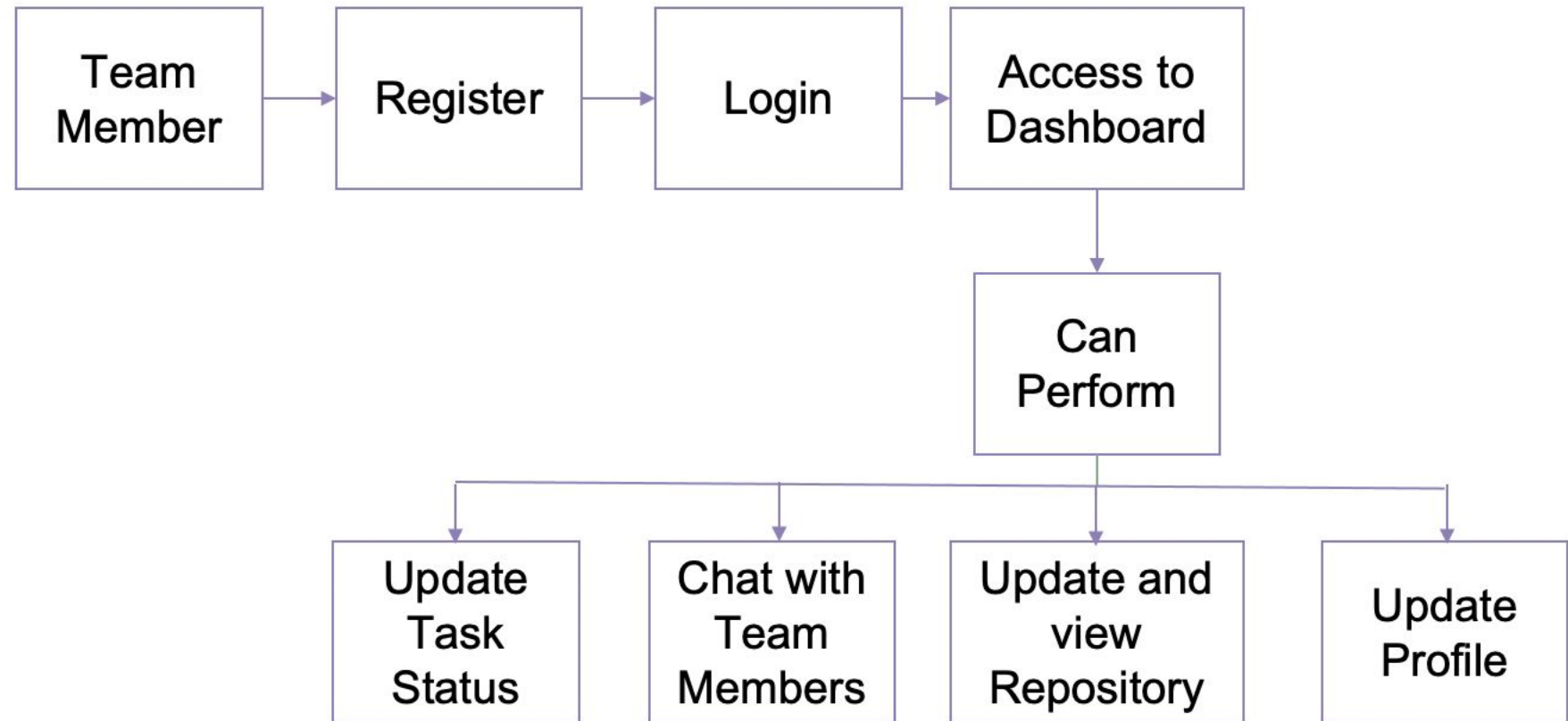
PROJECT FLOW DIAGRAM

- FOR MANAGERS:



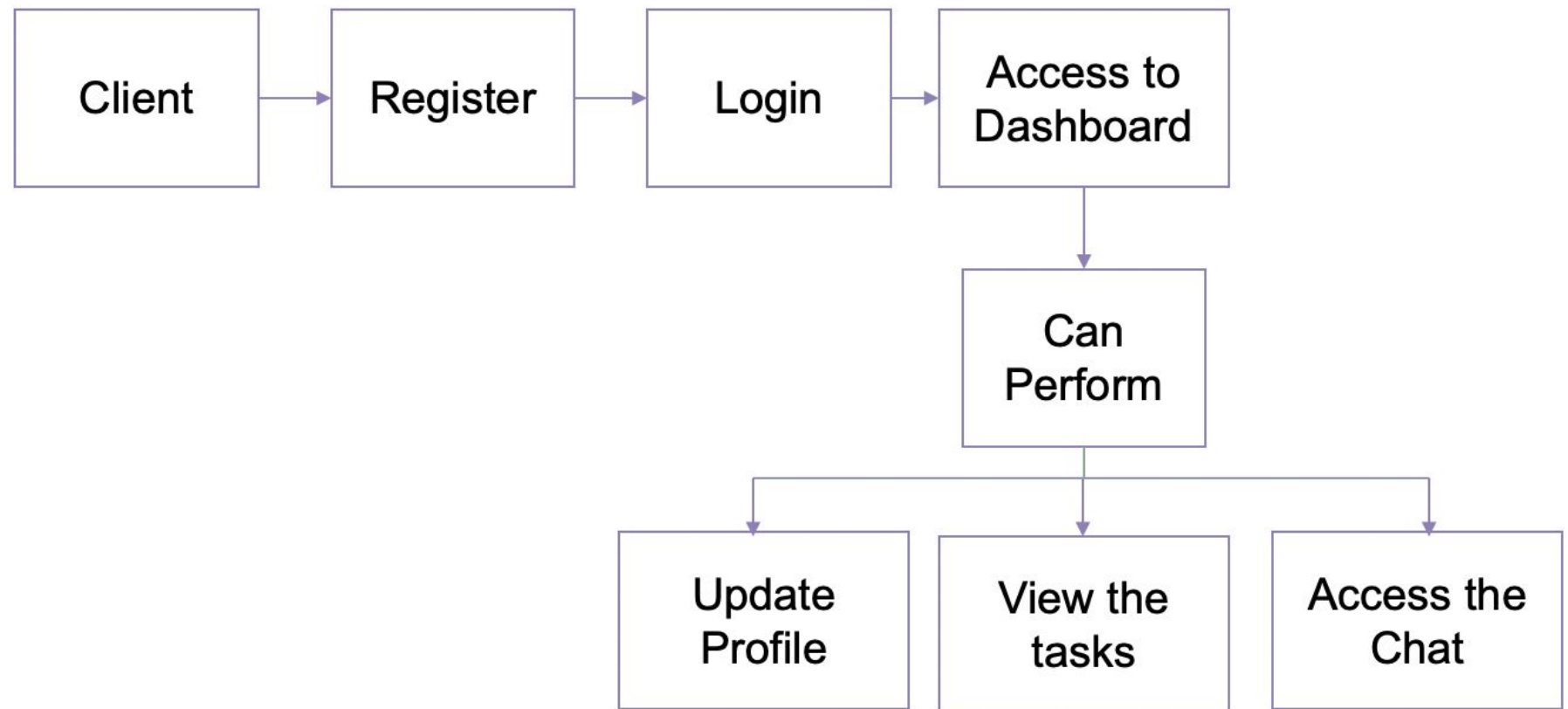
PROJECT FLOW DIAGRAM

- FOR TEAM-MEMBERS:



PROJECT FLOW DIAGRAM

- FOR CLIENTS:



Product Backlog Overview (User Stories)

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status
US-01	User Story	Registration	Manager	Register as Manager	I can register with my details and my user role as Manager to have access to the modules as manager	High	1	Complete
			Team Member	Register as Team Member	I can register with my details and my user role as Team Member to have access to the modules as Team Member	High	2	Complete
			Client	Register as Client	I can register with my details and my user role as Client to have access to the modules as Client	High	2	Complete
US-02	User Story	Login	Manager/Team Member/Client	Log in with username and password	I can be successfully Logged in as a the role which I have mentioned in my Registration	High	1	Complete
US-03	User Story	Tasks and Project	Manager	Create and Add New project	I can define the new project , name it and add it to the database to track it	High	3	Complete
			Manager	Add the task to the team members	I can create different task for the project present and link them to team members to keep track of the work and to whom it is assigned	High	4	Complete
			Team members	View the tasks assigned by manager	I can be able to check the tasks that are assigned to me along with the finish date.	High	4	Complete

Product Backlog Overview Continued..

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status
US-04	User Story	Chat Function	Manager/Team Member/Client	View all the groups of which I am part of	I can chat and communicate with all team members,manager and the client present in my group(one-to-all basis)	High	7	Complete
			Manager/Team Member/Client	View all individual in the project	I can chat and communicate with the intended member one-on -one basis	High	8	Complete
US-05	User Story	Timelines	Manager/Team Member/Client	Add Timelines to the task	I can set priorities and deadlines for the tasks and associated project and make it easier to track if the tasks are being completed on time.	High	6	Complete
US-06	User Story	Repository	Manager/Team Member/Client	Get access to the repository	I can able to upload, download and edit the files in the repository and share data across all members	High	5	Complete
US-07	User Story	Dashboard	Manager	Able to see if the task is completed	I can view the overall progress of Project, teams and team members	High	8	Complete
			Manager/Team Member/Client	Able to see the dashboard and all the modules on it	I can access all the modules as per the need	High	5	Complete
US-08	User Story	Calendar	Manager/ Client/ Team-Member	Access and check events and my task in Calendar	I can view the events and tasks assigned to me and their expected delivery date, so that my work can be prioritized	High	6	Complete
TS-01	Technical Story	Presentations /Documentation /Technical Papers /User Manuals		Create Presentation for every Sprints with the feedback received from previous Sprint . Modify the technical paper to include current details. Documentation and updating of user manuals etc		Moderate	All Sprints	Complete

Recap of CS-691

(Sprint 1 -Sprint 4)

Sprint 1-Sprint 2 Recap (CS691)

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-01	User Story	Registration	Manager	Register as Manager	I can register with my details and my user role as Manager to have access to the modules as manager	High	1	Complete	4
US-02	User Story	Login	Manager/Team Member/Client	Log in with username and password	I can be successfully Logged in as a the role which I have mentioned in my Registration	High	1	Complete	4
US-01	User Story	Registration	Team Member	Register as Team Member	I can register with my details and my user role as Team Member to have access to the modules as Team Member	High	2	Complete	2
US-01	User Story	Registration	Client	Register as Client	I can register with my details and my user role as Client to have access to the modules as Client	High	2	Complete	2
Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points	
T-01	Project Task	Registration	Frontend UI	Frontend UI and form made for registration page with sends the values entered to backend database	High	1	Completed	3	
T-02	Project Task	Login	Frontend UI	Login form was made along with validations so that the user can login with the registered details	High	1	Completed	2	
T-03	Project Task		Frontend UI	Designed Navbar and header to Route to different pages on Home screen	High	2	Completed	4	


Sprint 3-Sprint 4 Recap (CS691)

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-03	User Story	Tasks and Project	Manager	Create and Add New project	I can define the new project , name it and add it to the database to track it	High	3	Complete	8
US-03	User Story	Tasks and Project	Manager	Add the task to the team members	I can create different task for the project present and link them to team members to keep track of the work and to whom it is assigned	High	4	Complete	8
US-03	User Story	Tasks and Project	Team members	View the tasks assigned by manager	I can be able to check the tasks that are assigned to me along with the finish date.	High	4	Complete	8

Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points
T-03	Project Task	Tasks and Project	Frontend UI	Project table was designed with the creator name and added project will be saved in the database	High	3	Complete	2
T-031	Project Task	Tasks and Project	Frontend UI	Task Modal was made with all the required details.	High	3	Complete	3
T-032	Project Task	Tasks and Project	Frontend UI	Task table was made with all the details from the task modal.	High	3	Complete	2

Committed and Completed Tasks for CS-691

- Total User Stories Completed=3 (including features like Registration, Login and the Main task of assigning Projects and Task)
- Committed task = 3 User Stories
- The MVP was ready at the end of Sprint 4
- 98% of the committed work completed (Columns like finish date were not included)



Points that need Improvement as per the Sprint1-Sprint 4 Retrospective

- Scheduling Meetings
- Increase the frequency of Meetings
- Deadlines for task completion
- Improve familiarity with the frameworks
- Discuss working and design of the Features

Recap of CS-692

(Sprint 5 -Sprint 7)

Sprint 5 Recap

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-06	User Story	Repository	Manager/Team Member/Client	Get access to the repository	I can able to upload, download and edit the files in the repository and share data across all members	High	5	Complete	4
US-07	User Story	Dashboard	Manager/Team Member/Client	Able to see the dashboard and all the modules on it	I can access all the modules as per the need	High	5	Complete	4

Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points
T-081	Project Task	Calendar	Calendar Back end functionality to Access, add events	I can set priorities and deadlines for the project to access and add events in calendar and access them from front end	High	5	Partial	4
T-001	Team Task	-	Improvement	As per project feedback by professor and the areas that needed improvement based on previous discussed Retrospective, team performance and Presentation skills and content was improved	High	5	Complete	-

TS-01	Technical Story	Presentations /Documentation /Technical Papers /User Manuals	Create Presentation for every Sprints with the feedback received from previous Sprint . Modify the technical paper to include current details. Documentation and updating of user manuals etc	Moderate	All Sprints	Complete
-------	-----------------	--	---	----------	-------------	----------

Committed v/s Completed

- Total Committed task = 2 User Stories + Technical Story+ 2 Tasks
- Total Completed task = 2 User Stories + Technical Story+ 1 Tasks
- 95% of the committed work completed (Calendar Task was not integrated with the Frontend)

Retrospective for Sprint 5:

- Discussing Technical details to help the team members to understand the tasks and avoid rework

Sprint 6 Recap

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-05	User Story	Timelines	Manager/Team Member/Client	Add Timelines to the task	I can set priorities and deadlines for the tasks and associated project and make it easier to track if the tasks are being completed on time.	High	6	Complete	3
US-08	User Story	Calendar	Manager/ Client/ Team-Member	Access and check events and my task in Calendar	I can view the events and tasks assigned to me and their expected delivery date, so that my work can be prioritized	High	6	Complete	4
Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points	
T-031	Project Task	Project/Task	Modify the Projects to include the name of the creator	Add the Username of the manager who created the project in details so that only he/she can view or edit the Project and to keep track.	Moderate	6	Complete	3	
T-032	Project Task	Project/Task	Redo the tasks and Project page to include dates	Add Finish Date attribute to the the Task table from front-end to take the estimate date for completion of task	Moderate	6	Complete	2	
T-001	Team Task	-	Improvement	As per project feedback by professor and the areas that needed improvement based on previous discussed Retrospective, team performance and Presentation skills and content was improved	High	6	Complete	-	
TS-01	Technical Story	Presentations /Documentation /Technical Papers /User Manuals	Create Presentation for every Sprints with the feedback received from previous Sprint . Modify the technical paper to include current details. Documentation and updating of user manuals etc			Moderate	All Sprints	Complete	

Committed v/s Completed

- Total Committed task = 2 User Stories + Technical Story+ 3 Tasks
- Total Completed task = 2 User Stories + Technical Story+ 3 Tasks
- 100% of the committed work completed

Retrospective for Sprint 6:

- Meet up frequently with the team to give updates regarding work done

Sprint 7 Recap

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-04	User Story	Chat Function	Manager/Team Member/Client	View all the groups of which I am part of	I can chat and communicate with all team members,manager and the client present in my group(one-to-all basis)	High	7	Complete	8
Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points	
T-071	Project Task	Dashboard	Profile Page	Profile page can be viewed and customized as per the user	Moderate	7	Complete	2	
T-072	Project Task	Dashboard	Add the profile picture	Add the upload photo functionality to customize the page by uploading user picture.	Moderate	7	Partial	4	
T-073	Project Task	Dashboard	Update UI and add CSS	Update Frontend UI and add CSS so that the dashboard looks more professional	Moderate	7	Complete	4	
T-001	Team Task	-	Improvement	As per project feedback by professor and the areas that needed improvement based on previous discussed Retrospective, team performance and Presentation skills and content was improved	High	7	Complete	-	
TS-01	Technical Story	Presentations /Documentation /Technical Papers /User Manuals	Create Presentation for every Sprints with the feedback received from previous Sprint . Modify the technical paper to include current details. Documentation and updating of user manuals etc			Moderate	All Sprints	Complete	

Committed v/s Completed

- Total Committed task = 1 User Stories + Technical Story+ 5 Tasks
- Total Completed task = 1 User Stories + Technical Story+ 4 Tasks
- 85% of the committed work completed (Photo uploaded couldn't be retained after session logout)

Retrospective for Sprint 7:

- Share the technology knowledge with the team for integration of the work.
i.e frontend and backend

Sprint 8

Sprint 8

ID	Type	Name	As a... (Persona)	I want to be able to	So That	Priority	Sprint	Status	Points
US-04	User Story	Chat Function	Manager/Team Member/Client	View all individual in the project	I can chat and communicate with the intended member one-on-one basis	High	8	Complete	7
US-07	User Story	Dashboard	Manager	See if the task is completed	I can view the overall progress of Project, teams and team members	High	8	Complete	4
US-09	User Story	Chat Bot	Chat Bot Added	Chat and get access to the frequently used technology and common questions	I can get answers about the technology and other common questions	Moderate	8	Completed	3

Task ID	Type	User Story to which the Task Belongs	Task Name	Task Description (So that..)	Priority	Sprint	Status	Points
T-074	Project Task	Dashboard	Store profile picture in database	Integrate profile picture to database to retain it after session logout	Moderate	8	Complete	2
T-075	Project Task	Dashboard	Update Setting page, to include admin module	Admin module needs to be created in setting page to raise ticket. Since there is dependency on admin to create chat group, this is essential. When we raise this ticket, a mail is triggered to admin.	Moderate	8	Complete	3
T-076	Project Task	Dashboard	Modifications in UI	Modification and updating the project to include copyrights, social media references, adjustment in CSS and adding content to FAQ page	Moderate	8	Complete	2
T-074	Project Task	Dashboard	updation of Username and Password	Username and password can be updated from the Settings page in Profile	Low	8	Completed	2
T-001	Team Task	-	Improvement	As per project feedback by professor and the areas that needed improvement based on previous discussed Retrospective, team performance and Presentation skills and content was improved	Moderate	8	Complete	-

TS-01	Technical Story	Presentations /Documentation /Technical Papers /User Manuals	Create Presentation for every Sprints with the feedback received from previous Sprint . Modify the technical paper to include current details. Documentation and updating of user manuals etc	Moderate	All Sprints	Complete
-------	-----------------	--	---	----------	-------------	----------

Committed v/s Completed

- Total Committed task = 3 User Stories + Technical Story+ 5 Tasks
- Total Completed task = 3 User Stories + Technical Story+ 5 Tasks
- 100% of the committed work completed

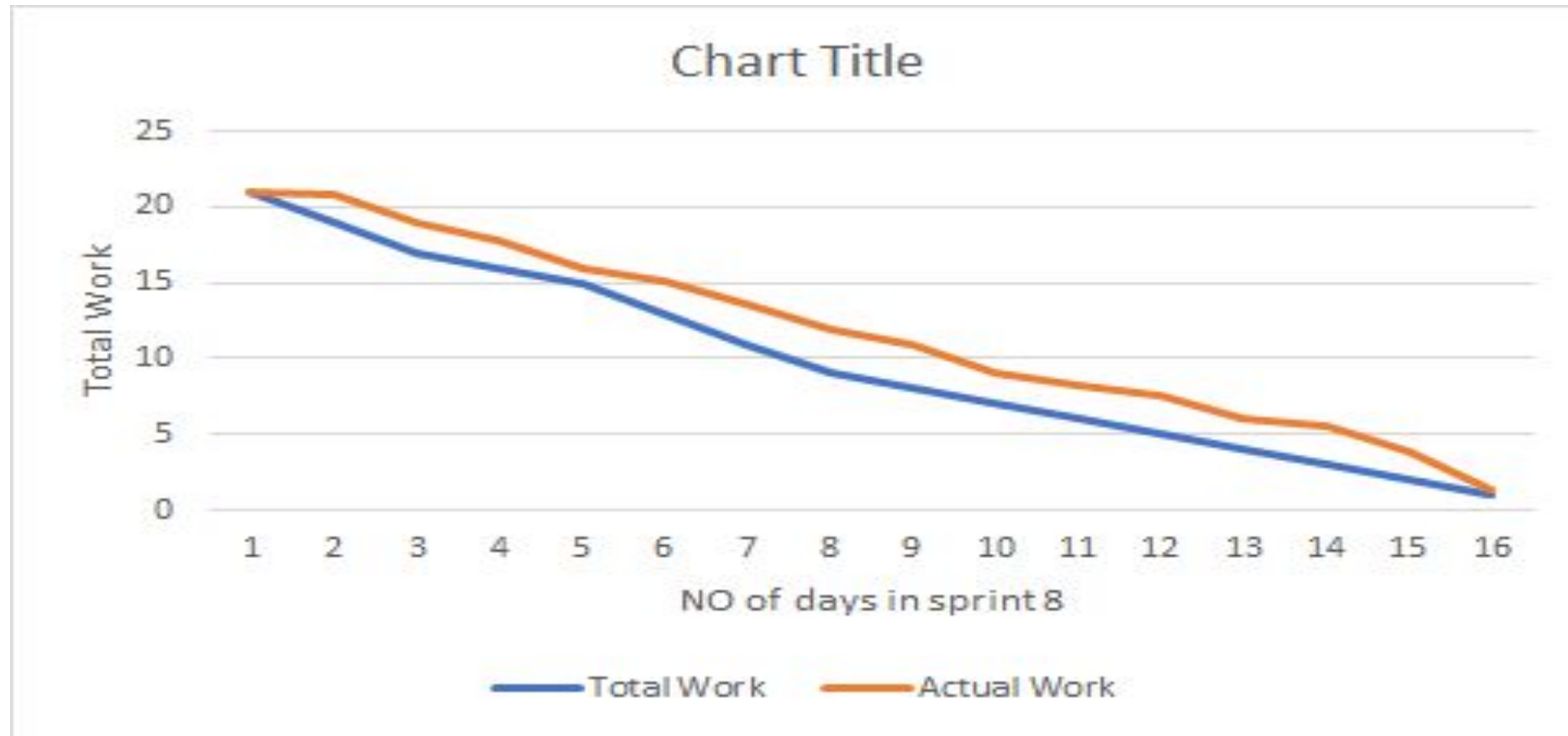
User Stories and Acceptance Criteria for Sprint 8

User Story	As a Manager/Team Member/Client	Acceptance Criteria
US-08 : Chat function	I should be able to chat with the team members and client in group chat as well as individual chat	<ul style="list-style-type: none">* All the users should have access to the chat box where they should be able to select the person and group they want to send the message.*All the users should be able to create the group they want to chat within.*The user should be provided with a text field where they can type the message that needs to be sent.*When a user sends a particular message to other, it should reflect in the other person's chat or on the group where it is sent.* The message should be stored so that the user can view the message whenever required.
US-09 : Dashboard	I should be able to upload the profile picture and as well as update the status of the task when work was done	<ul style="list-style-type: none">*Team member and manager can be able to upload profile picture.*Team member and manager will have access to update the status of task when the work was done.
US-10 : Settings	I should be able to contact the admin by sending an email.	The user will be able to contact the admin by providing the name, email and reason in the Settings page.
US-11 : Chatbot	I should be able to see the chatbot	<ul style="list-style-type: none">*When the user will login and go to home the chatbot will there at end of the screen with different options to choose with.*In chat bot, if need the user will be able to contact the admin just by clicking the link provided.

Test Cases Sprint 8

User Story	Scenario	Test Cases	Expected Result	PASS/FAIL	Test Data	Sprint
8.Chat function a. Manager b. Team Member c. Client	Messages	chat function (Group chat)	All team members , manager and client should be able to chat and discuss with each other in a group chat	PASS		Sprint 7
		Chat function (Individual chat)	All team members , manager and client should be able to chat and discuss with each other in an Individual chat	PASS		Sprint 8
	Group Chat	Add user to chat Group	If a person is to be added in the group chat, the admin should be able to add the person in that chat group	PASS		Sprint 8
9. Dashboard a. Manager b. Team Member c. Client	User details	Update Profile Picture	User should be able to upload the profile picture. .	PASS		Sprint 8
	Task Status	Update task status	When work done the Manager or team members will be able to update the status of the task	PASS		Sprint 8
10. Settings	Admin functionality	Contact admin	The user will be able to contact the admin by providing the name, email and reason.	PASS	Name: xxxx email: xxxx@xyz.com Reason: xxxx	Sprint 8
10. Settings	Username /Password updation	Update username and Password	The user will be able to update the username and Password in case of it is required	PASS	Username:XXXXXX/ Password:*****	Sprint 8
11. Chatbot	Chat Bot	Chat bot initialize	When the user will login and go to home the chatbot will there at end of the screen with different options to choose with.	PASS		Sprint 8
		Contact Admin	In chat bot, if need the user will be able to contact the admin just by clicking the link provided.	PASS		Sprint 8

Burn Down Chart for Sprint 8



Retrospective For Sprint 8

What was good?

The technology knowledge was shared with the team for integration of the work. i.e frontend and backend
(5)

Frequent collaborations with increased efficiency
(4)

What was bad?

Since everyone was busy with exams, it was difficult to adjust meetings timings
(4)

What can be improved?

Timings can be improved and work can be divided such that most of the team are not dependent on other members
(4)

Future Scope of Project Management Tool

Future Scope

- Generating Reports about timelines, projects and creating timelines and charts for visualization.
- Making a cloud repository .
- Adding more components to setting page to customize the account.
- Sending Email validation to confirm the user account during registration.
- Adding Pending/ Stuck/ Work In Progress to the status bar color coded for better interpretation

GitHub Links



- Project Link: https://github.com/Vamshi399/project_management_tool
- WiKi Page: https://github.com/Vamshi399/project_management_tool/wiki

THANK YOU

