

Project Manager Test Task

Task & Goal

Client A

- add an important payment feature and introduce Apple Pay as a way of completing payments

Client B

- wants more filters in the database
- and a new page on the platform
- with a chatbot to inform his customers about the status of their order

Goal

- Deliver all the features in 1 month

Team Member

Role	Team Member
Front End Developer	FE Developer 1
Back End Developer	BE Developer 1
	BE Developer 2
UX/UI Designer	Designer 1
Quality Assurance	Tester 1

1. Design and present briefly the flow of meetings and day-to-day in order to hit the goal of delivery in 1 month.

Answer: From Monday to Friday for the whole month, the team will work on the client's project.

2. How would you set SCRUM methodology in this case, what else would you propose?

Answer:

SPRINT

- It will be a one-time Sprint for the whole project in one month.
- The sprint will start with the sprint planning on the first day of the project.
- The scrum team will conduct daily scrum during the working days for 15 minutes.
- In the 4th week, as per the project schedule, the sprint review will be conducted where the team and the stakeholders gather to review completed work and determine whether additional changes are needed.
- On the last day of the project, the whole team attends a sprint retrospective to discuss what went well during the previous sprint cycle.

ROLES

- All the team members will be on the scrum team.
- The project manager has to be the Product Owner and the Scrum Master.

Name: Eliza Guderian
Date: 10 December 2021

Project Schedule

Overview Schedule					
Week 1	Mon 03 Jan 2022	Tue 04 Jan 2022	Wed 04 Jan 2022	Thurs 06 Jan 2022	Fri 07 Jan 2022
	Sprint Planning Day 1	Daily Scrum Day 2	Daily Scrum Day 3	Daily Scrum Day 4	Daily Scrum Day 5
Week 2	Mon 10 Jan 2022	Tue 11 Jan 2022	Wed 12 Jan 2022	Thurs 13 Jan 2022	Fri 14 Jan 2022
	Daily Scrum Day 6	Daily Scrum Day 7	Daily Scrum Day 8	Daily Scrum Day 9	Daily Scrum Day 10
Week 3	Mon 17 Jan 2022	Tue 18 Jan 2022	Wed 19 Jan 2022	Thurs 20 Jan 2022	Fri 21 Jan 2022
	Daily Scrum Day 11	Daily Scrum Day 12	Daily Scrum Day 13	Daily Scrum Day 14	Daily Scrum Day 15
Week 4	Mon 24 Jan 2022	Tue 25 Jan 2022	Wed 26 Jan 2022	Thurs 27 Jan 2022	Fri 28 Jan 2022
	Daily Scrum Day 16	Daily Scrum Day 17	Daily Scrum Day 18	Daily Scrum Day 19	Daily Scrum Day 20 Sprint Review
Week 5	Mon 31 Jan 2022				
	Sprint Retrospective				

3. How would you calculate the team's capacity?

Answer: If all the team member's allocation is one hundred percent, then 8 hours are inducted per working day and next, times the days of working throughout the whole month, the outcome will be the total hours of one sprint. The total amounts of the sprint's hour for the entire month need to be subtracted from the hours of the Scrum Ceremonies such as Sprint Planning, Review, Retrospective, and Daily Scrum. The result will be the hours of the team capacity.

1 Sprint = 21 Days

1 Day = 8 Hrs

Total Hours of working day = $8 \times 21 = 168$ Hrs

Total Hours of the Ceremonies Event: 9.25 Hrs

- Daily Scrum → 15 mins x 1 sprint (21 days) = 300 mins. (5 Hrs)
- Sprint Planning, Review, and Retrospective = 255 mins. (4.25 Hrs)

Total hours of the working day - Total Hours of the ceremonies event = Team Capacity

$168 - 9.25 = 158.75$ (Team capacity per person)

Name: Eliza Guderian
Date: 10 December 2021

Team Capacity

Team member allocation

Role	Team Member	% Allocation	Hours/day	Hours/Sprint
Back End Developer	BE Developer 1	100%	8	168
	BE Developer 2	100%	8	168
Front End Developer	FE Developer 1	100%	8	168
UX/UI Designer	Designer 1	100%	8	168
QA	Tester 1	100%	8	168
Scrum Team →			40 Hrs	840 Hrs

Ceremonies Event

Ceremonies	Week 1	Week 2	Week 3	Week 4	Week 5	Total Mins	Total Hrs
Daily Scrum	3-7/1 = 75	10-14/1 = 75	17-21/1 = 75	24-28/1 = 75		300	5
Sprint Planning	3/1 = 90					90	1.5
Sprint Review				28/1 = 90		90	1.5
Sprint Retrospective					31/1 = 75	75	1.25
Total →						555 mins	9.25 Hrs

Name: Eliza Guderian
Date: 10 December 2021

Available team capacity

Hours / Day / Resource										
Team Member	Hrs/Day	Allocation	Week 1	Week 2	Week 3	Week 4	Week 5	Sprint	Ceremony Time	Available Capacity
BE Developer 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
BE Developer 2	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
FE Developer 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
Designer 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
Tester 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
Total →								840 Hrs	46.25 Hrs	793.75 Hrs

4. What are the necessary documents and information you will need before you start?

Answer: Product backlog, estimation number of user stories, and project charter.

5. Define 3 tasks (user stories)

Answer:

1. Apple Pay → **As** an active user **I want** to be able to click the Apple pay button **so that** I don't have to key in my bank's card info.

Scenario: Active user on the shopping basket page

Given I'm on my shopping basket page

When I click the Apple Pay button

Then the system proceeds to check out and show me the amount that I need to pay and the shipping address.

2. Filter for the database → **As** an active user or visitor **I want** to search the products that I like **so that** I can find them quickly.

Scenario: Active user/visitor using the search function on the website

Given I'm using a search function

When I type in a product name

Then the system will show me the correct products immediately

3. Chatbot → **As** an active user or visitor **I want** to be able to ask questions on the website **so that** I can get a quick response.

Scenario: Active user/visitors on the main website page

Given I'm on the website main page

When I click the Chatbot

Then the chat will open

User Stories

Client	Task	User Stories	Acceptance Criteria
A	Apple pay	As an active user I want to be able to click the Apple pay button So that I don't have to key in my bank's card info	Scenario: Active user on the shopping basket page Given I'm on my shopping basket page When I click the Apple Pay button Then the system proceeds to check out and show me the amount that I need to pay and the shipping address.
B	Website redesigned	As an active user or visitor I want to see a modern and up to date webpage So that I can stay interested	Scenario: Active user/visitor on the newly designed homepage Given I'm on a newly designed homepage When I see the new features Then it makes me curious to know more about the website
	Filters for database	As an active user or visitor I want to search the products that I like So that I can find them quickly	Scenario: Active user/visitor using the search function on the website Given I'm using a search function When I type in a product name Then the system will show me the correct products immediately
	Chatbot	As an active user or visitor I want to be able to ask questions on the website So that I can get a quick respond	Scenario: Active user/visitors on the main website page Given I'm on the website main page When I click the Chatbot Then the chat will open

6. How would you define task dependencies?

Answer: The task dependencies will be defined according to the epic of the task. For example, the epic will be apple pay, filter for the database, and chatbot. All user stories will be arranged according to their epic.

Task Dependencies

Apple Pay	Website Redesign	Filters for Database	ChatBot
Allow apple pay IP addresses - <i>BE Dev 1</i>	Create design pattern - <i>UX/UI Designer 1</i>	Write the query - <i>BE Dev 2</i>	Customized your bot profile - <i>BE Dev 2</i>
Configure merchant ID certificate - <i>BE Dev 1</i>	Design the Chatbot - <i>UX/UI Designer 1</i>	Write the API endpoint to connect to the frontend - <i>BE Dev 2</i>	Build your bot flow - <i>BE Dev 2</i>
Domain registration and verification - <i>BE Dev 1</i>	Build the navigation - <i>FE Dev 1</i>	Build the search input - <i>FE Dev 1</i>	Develop the bot's sentiment analysis feature - <i>BE Dev 2</i>
Creating API endpoints - <i>FE Dev 1</i>	Build the footer - <i>FE Dev 1</i>	Write the API endpoint to connect to the backend - <i>FE Dev 1</i>	Write the logic - <i>FE Dev 1</i>
Build interface - <i>FE Dev 1</i>			Style the bot - <i>FE Dev 1</i>

7. After the grooming meeting you get the dev team estimations.

- a. Task 1 - apple pay > 1 month of work, 50% backend work 50% front end
- b. Task 2 - website redesign > 2 weeks front end work
- c. Task 3 - new filters > 2 weeks back end work, 3 days front end
- d. Task 4 - chatbot > 2 weeks back end work, 1-week front end

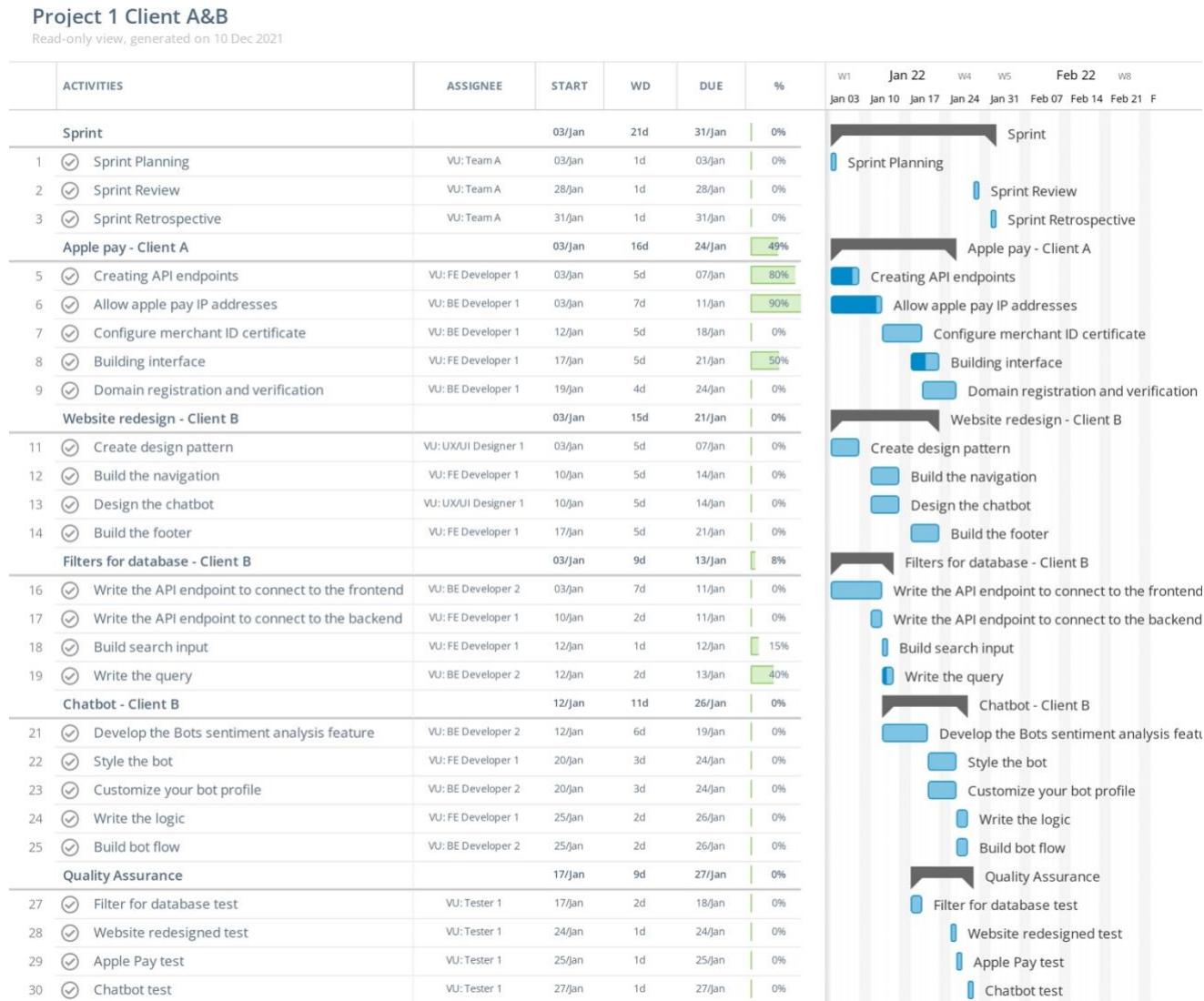
• **How do you allocate resources to ensure the delivery of full tasks?**

Answer: Assign each team member to the task that fits their skills. Arranged them to work according to their capacity and estimation.

Name: Eliza Guderian
Date: 10 December 2021

- Define dependencies and create a gantt chart

Answer:



Name: Eliza Guderian
Date: 10 December 2021

- **Any red flags to the CEO?**

Answer:

Apple Pay → Configure Merchant ID Certificate

- The process can take up to more than five days which can cause the project not to be delivered on time.

The Overall Project for Client A&B

- There is a possibility the clients might not be satisfied with our outcome task due to lack of workforce and time given. When that happens, we might lose our active clients.

8. You are 2 weeks into the sprint when the front-end developers start implementation of Apple Pay, you realize you don't have an apple phone.

1. What do you do? **Answer:** Request the company to provide a new or used iPhone.
2. After solving a. You realise that you don't have access to Apple Pay in Serbia as

you are not a verified country. How do you solve this problem? **Answer:** Use third-party software to get around the restriction.

3. 2 days in you realise that all the technical blockings will delay your task for 1

week, how do you reallocate resources? **Answer:** Reallocate the resources to start the task a week later.

Issues Report

No.	Problem	Solution
1	FE Developer 1 implemented Apple Pay. iPhone was not available, and ultimately, we could not test it.	Request company to provide a new or used iPhone for testing.
2	There is no access to Apple Pay in Serbia because it's listed as a not verified country.	Bypass the Apple Pay restriction with Monese.
3	2nd day of the sprint, the task was delayed for a week due to technical blockings.	Reallocate resources to begin the project a week later.

Name: Eliza Guderian
Date: 10 December 2021

9. You employed an intern for front-end development. Intern is half-time employed and his productivity is 50% as he is just learning, however, he is decreasing the productivity of your main front-end dev to 80%, do capacity planning again and make another delivery roadmap with the new updated resources.

Updated capacity planning (Purple color words stands for updated)

Hours / Day / Resource										
Team Member	Hrs/Day	Allocation	Week 1	Week 2	Week 3	Week 4	Week 5	Sprint	Ceremony Time	Available Capacity
BE Developer 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
BE Developer 2	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
FE Developer 1	6.4	80%	3-7/1 = 32 Hrs	10-14/1 = 32 Hrs	17-21/1 = 32 Hrs	24-28/1 = 32 Hrs	31/1 = 6.4 Hrs	134.4	9.25	125.15
Intern FE Developer 2	4	50%	3-7/1 = 20 Hrs	10-14/1 = 20 Hrs	17-21/1 = 20 Hrs	24-28/1 = 20 Hrs	31/1 = 4 Hrs	84	9.25	74.75
Designer 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
Tester 1	8	100%	3-7/1 = 40 Hrs	10-14/1 = 40 Hrs	17-21/1 = 40 Hrs	24-28/1 = 40 Hrs	31/1 = 8 Hrs	168	9.25	158.75
Total →								898.4 Hrs	46.25 Hrs	834.9 Hrs

Name: Eliza Guderian
Date: 10 December 2021

Updated Gantt Chart

Project 1 Client A&B

Read-only view, generated on 10 Dec 2021

