PLACEMENT TEST – INTERN BA

Dinithi Bandara
199080610251 (NIC)
University of Colombo School of Computing
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I. What is "Story Points" in Agile? (5 marks)

Story points is a way of estimating the amount of effort required to complete a user story in your product backlog. You'll typically estimate story points before a sprint planning meeting, because that's when your team decides how much work they can do in an upcoming sprint.

II. Write a user story to schedule a Medical Appointment in an Online Channeling App. (15 marks)

As a patient, I want to be able to schedule a medical appointment online, so I can save my time and get the job done easily

III. "The teams following the Agile Methodology can always perform better than the teams following other Software Development Methodologies." State your arguments about this statement whether you accept it or not. (15 marks)

When compared to a team who follows traditional methods, a team who follows Agile methodology can always perform better than the teams. There are a variety of reasons we can see to prove this statement.

When it comes to making changes in the product or a process, agile methodology is much more flexible than the waterfall methodology. In agile methodology, everything is out there and transparent. It facilitates team members to view the progress right from the start to the end. In the traditional approach, every single process is clearly defined and planned from the beginning of the project. At the same time, agile management allows teams to get constant feedback that helps provide better output.
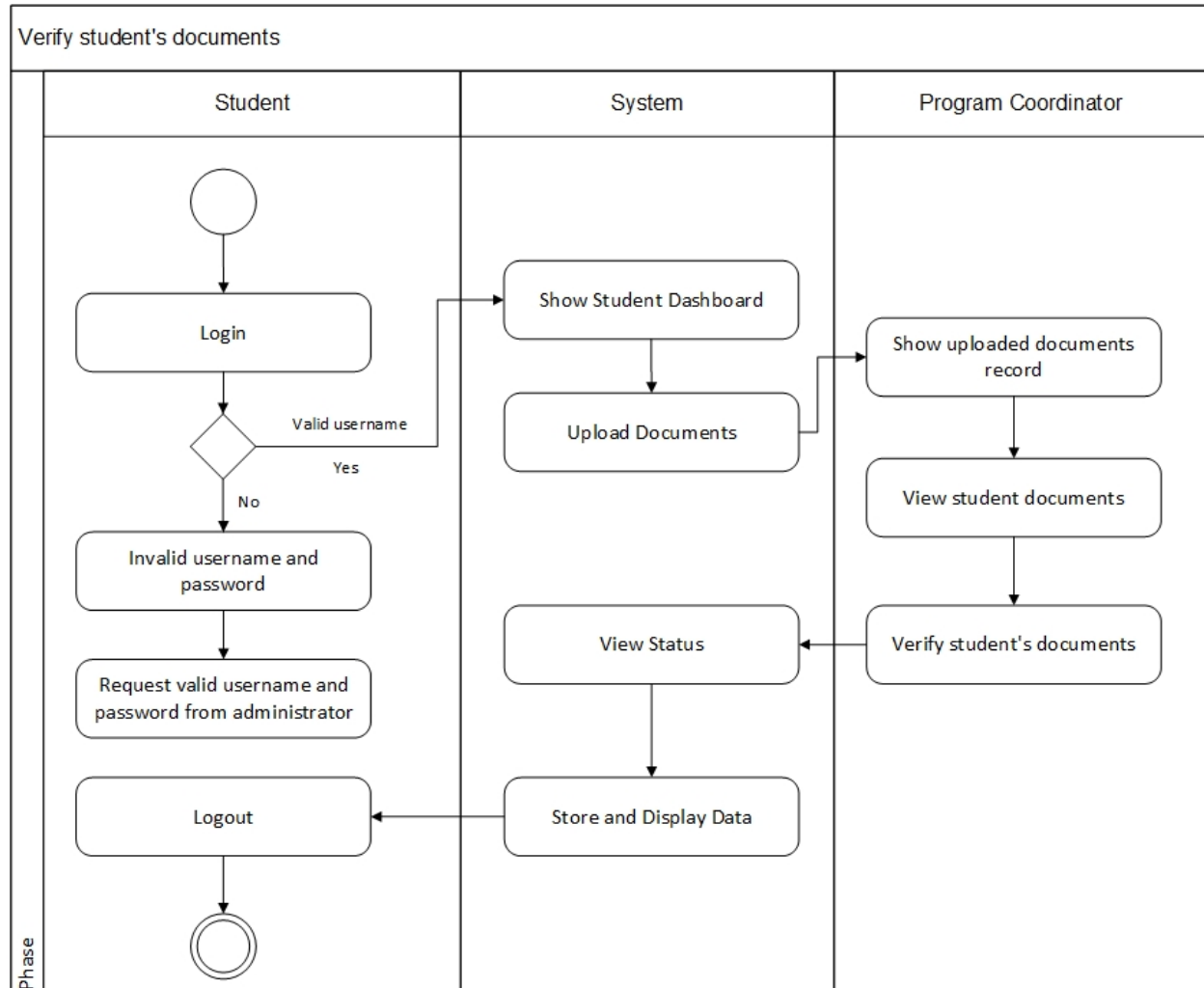
And finally, in the agile methodology, every team member shares ownership of the project. Each one of them plays an active role to complete the sprint within the

estimated time. Unlike traditional project management, everyone involved in the project can easily see the progress from the beginning to the end.

IV. List down the UML Diagrams widely in use. Briefly explain the listed diagrams and give one example of any of them. (20 marks)

● **Activity Diagram**

It is generally used to describe the flow of different activities and actions

Verify student's documents

Student	System	Program Coordinator

Login

Valid username
Yes
No

Invalid username and password

Request valid username and password from administrator

Logout

Show Student Dashboard

Upload Documents

View Status

Store and Display Data

Show uploaded documents record

View student documents

Verify student's documents

Phase

- **Use Case Diagram.**

Used to analyze the system's high-level requirements. These requirements are expressed through different use cases.
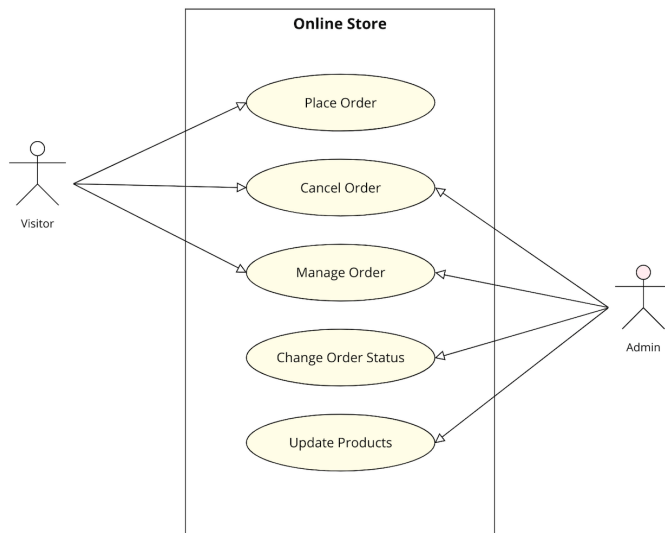

- **State Machine UML diagram.**

Used to describe the different states of a component within a system. It takes the name state machine because the diagram is essentially a machine that describes the several states of an object and how it changes based on internal and external events.
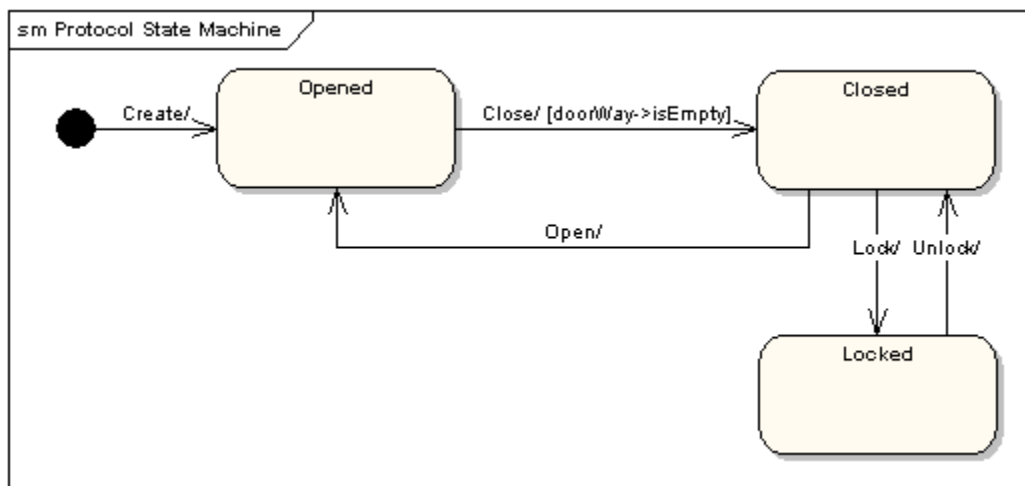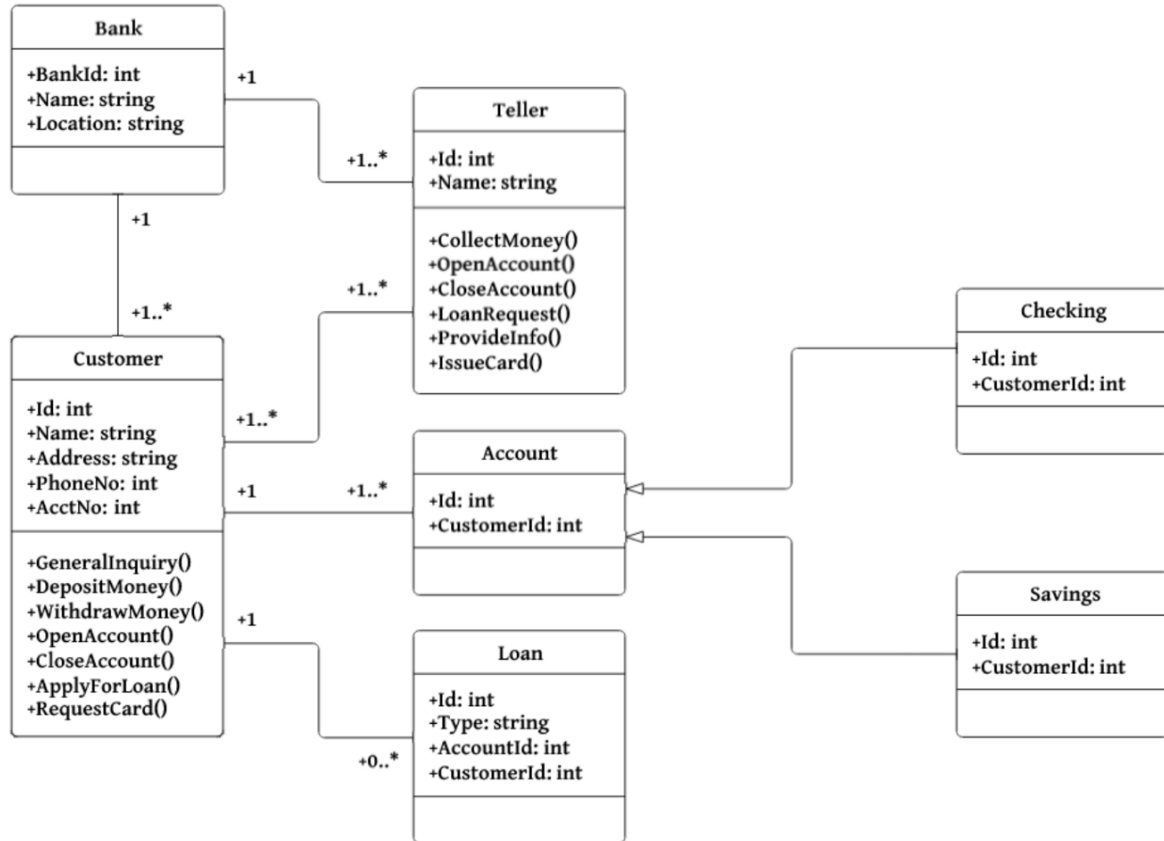
- **Sequence UML Diagram.**

describe the sequence of messages and interactions that happen between actors and objects.
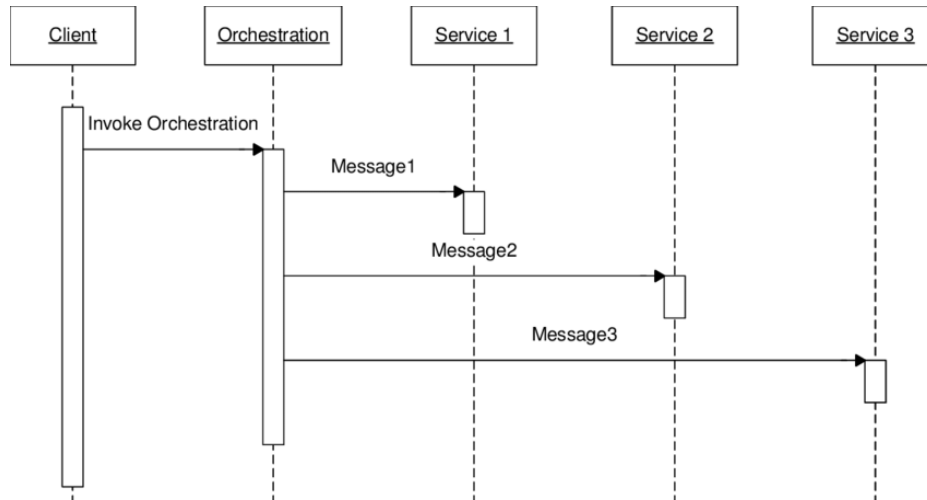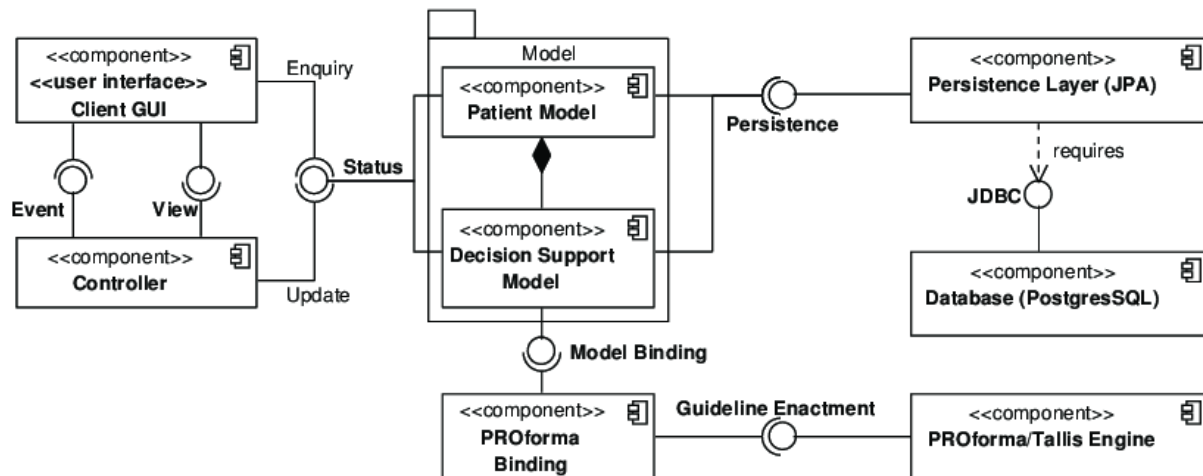
● **Class Diagram.**

Diagram based on the Object-Oriented Programming paradigm. It contain classes, alongside with their attributes and their behaviors
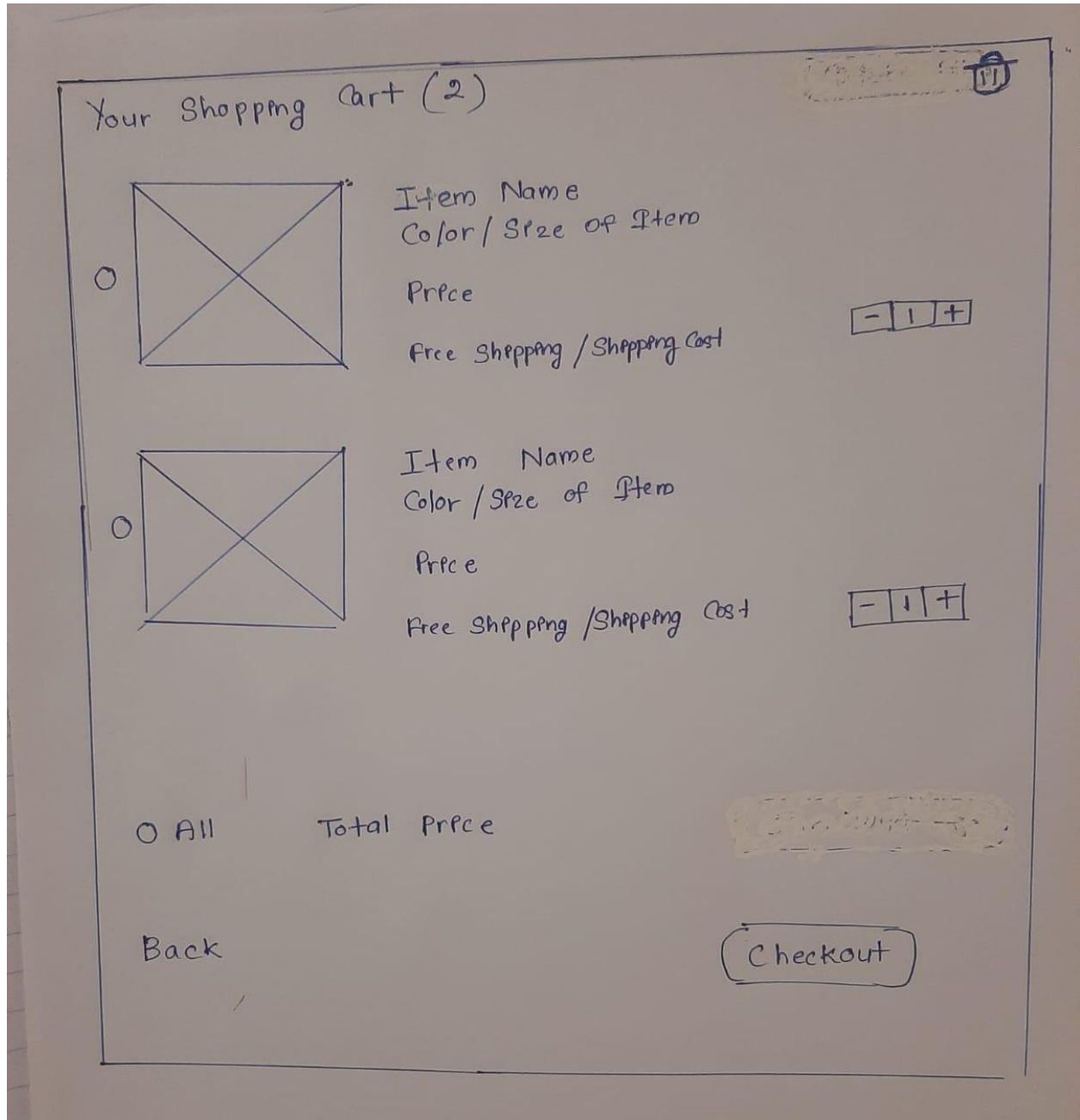
- **Component Diagram.**

break down the system into smaller components. It can help us get a simplified top-level view of a more complex system

V. Draw wireframe for the user journey of Shopping Cart functionality to use in an online shopping mobile app consisting of all needed functionalities. Also, briefly explain the functional elements of the wireframe. (20 marks)

In this shopping cart wireframe, we can see the items that have been added to the shopping cart by the user. There we can see the item details. And also there is an

option for the user that he can add the quantity he wishes to purchase in each item. Not only that there is an option to select one or more items or all the items before proceeding to the checkout process. Also the user can delete items if he wants to remove them from the shopping cart as well. Finally there is a back button option that is given to the user to redirect to the previous page if he needs.

VI. "Mr. Groot is the son of a farmer who lives in Taluhnia. He observed that the farmers live in Taluhnia facing difficulties in bringing their agro-products on time to the nearby towns. Since Mr. Groot is a Software Engineer and interested in Entrepreneurship, he has an idea to develop a mobile app to connect the farmers with vehicle owners who own delivery vehicles in nearby areas to deliver the agro products to the needed places as expected." Suggest a suitable business model with the most required features/modules to consider with the mobile app. State some unique features separately to simplify and enhance the end-user experience to facilitate them to use this app without much struggles. (25 marks)

Goal

- Connect the farmers with vehicle owners who own delivery vehicles in nearby areas to deliver the agro products to the needed places as expected

Objectives

- Develop a mobile application to interconnect farmers, buyers and vehicle owners
- Create a platform to assist the farmers in finding the best buyers and nearby vehicle owners

Main Functionalities

Farmer :-

Sell the harvest for the best buyer

Negotiation with buyers regarding the price and quantity before selling crops

Review vehicle owners based on the experiences gained in vegetable selling journey

Publish advertisements to the built in e-market platform to sell the harvest

Customer:-

Filter advertisements of the nearby farmers

Buy vegetables from nearby farmers

Do the payment through app

Vehicle Owner:-

Update transportation cost and the transportation quantity

Enter the radius of the pickup area that can be done

Schedule a trip to pick up the harvest

Add vehicles to the app