1. Ask question to make a clear for above requirements and write them in the form of Excel (Q&A)

Calendar

Description automatically generated

1. Functional, Non-Functional and domain requirements for a Ticket Vendor Machine.

Functional:

1. Allow users to select destination.
2. Allow users to select payment method.
3. Should be able to process credit card payments and issue paper tickets with barcodes.
4. Generate a QR code for users paying through digital wallets.
5. Display a menu of potential destinations to the user.
6. Request credit card input from the user.
7. Validate the credit transaction before issuing a ticket.
8. The machine should be able to issue a receipt upon request

Non-Functional:

1. User-friendly and easy to use.
2. Respond quickly to user input.
3. The ticket vendor machine should be reliable.
4. The ticket vendor machine should be able to handle multiple payment transactions simultaneously.
5. The ticket vendor machine should be able to communicate with the bank or digital wallet for payment processing.

Domain Requirements:

1. Ticket machines must comply with all relevant laws and regulations governing public transport ticketing systems.
2. Ticket machines must be compatible with all types of payment methods used in the transportation system.
3. Ticket machines must be compatible with existing transport system infrastructure.
4. Ticket machines must be designed with security features to prevent fraud or unauthorized access.
5. Ticket machines will be able to generate reports and transaction logs for audit purposes.
6. Ticket machines must be able to provide a high level of accuracy in ticketing and payment processing.
7. Use Case modelling:

Chart, bubble chart

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1. Activity diagram:

Diagram, box and whisker chart

Description automatically generated

1. Sequence diagram, State chart diagram, and Class diagram
2. Sequence diagram:

Chart, box and whisker chart

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1. State chart diagram:

Diagram

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1. Class diagram:

Diagram

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1. Wireframe:

Graphical user interface, application

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Credit Card :

Graphical user interface

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Digital Wallet :

Qr code

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1. MVC model:

A picture containing diagram

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Deployment diagram:

Diagram

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