Course Code : CSE 404

Course Title : Software Engineering and ISD Laboratory

Project name : Bus ticket booking management system

Experiment no: 05

Experiment name: Application of Software Development Models: Incremental model, Iterative model

Submitted To

Dr. Mohammad Zahidur Rahman
Professor
Dr. Md. Humayun Kabir
Professor
Department of Computer Science & Engineering
Jahangirnagar University, Savar.

Group: 02

Sl	Class Roll	Name
01	342	Tama Shil
02	370	Prokash Maitra
03	374	Mubasher adnan jihad
04	375	Pritam Saha

Pritam Saha
ID: 375

Incremental model:

Incremental model involves developing the system in small manageable increments or iterations. Each iteration adds new features or functionalities to the system, building upon the previous version. This approaches for continous improvement, quick feedback and the availability to adapt changing requirements.

Incremental model for banking system:

1st increment:

1st increment includes basic account management, basic user management, basic employee management, editing documentation, atm information, documentation.

2nd increment: M

More details about account user employee, Atm information.

documentation on production capabilities,

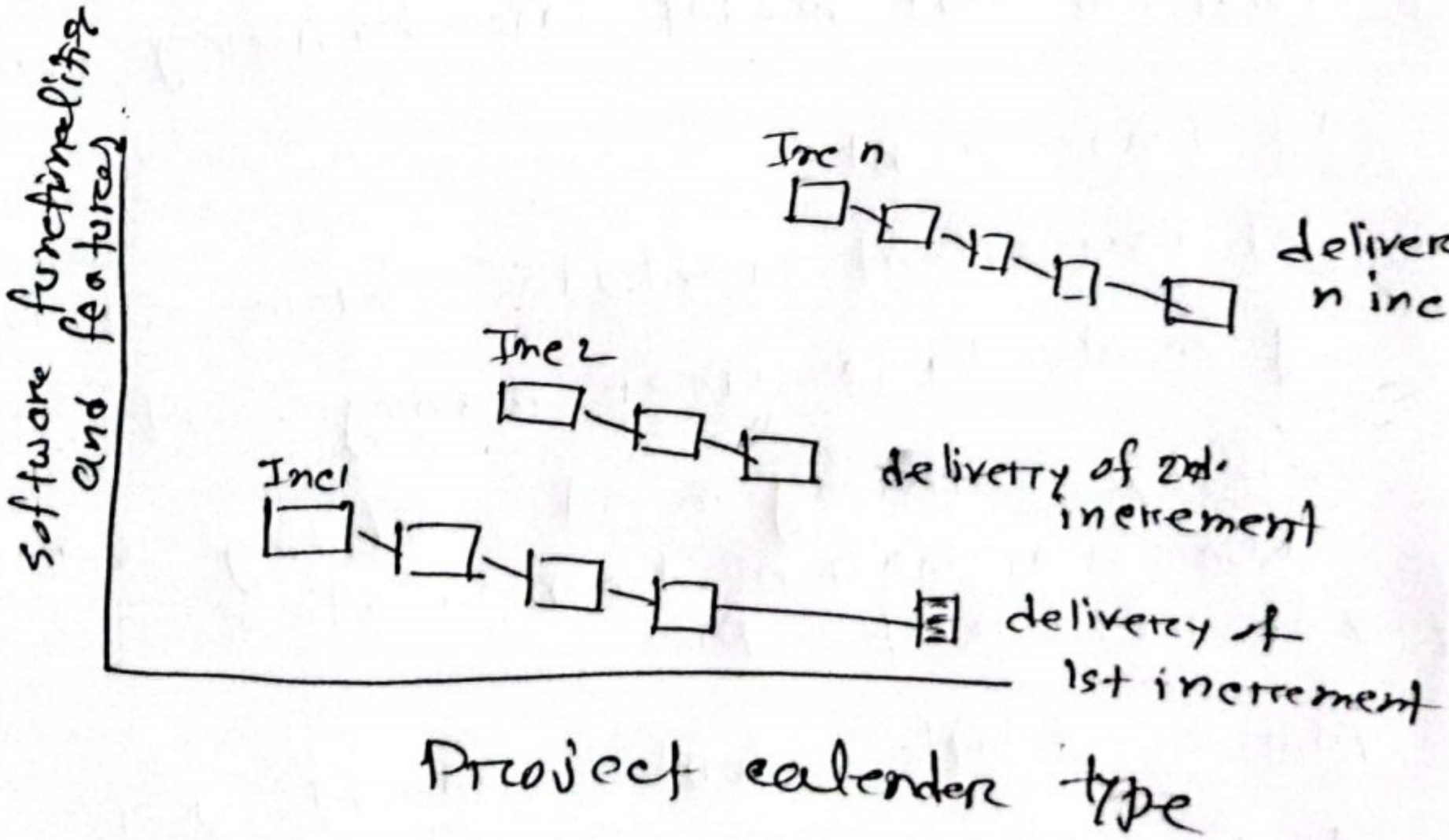
3rd increment:

Spelling and grammar checking that will update the software even more,

4th increment:

Advance face layout capabilities. this step includes the complete software layout for the module. which will include:

1. Software requirement.
2. Use case
3. Activity.
4. UML etc

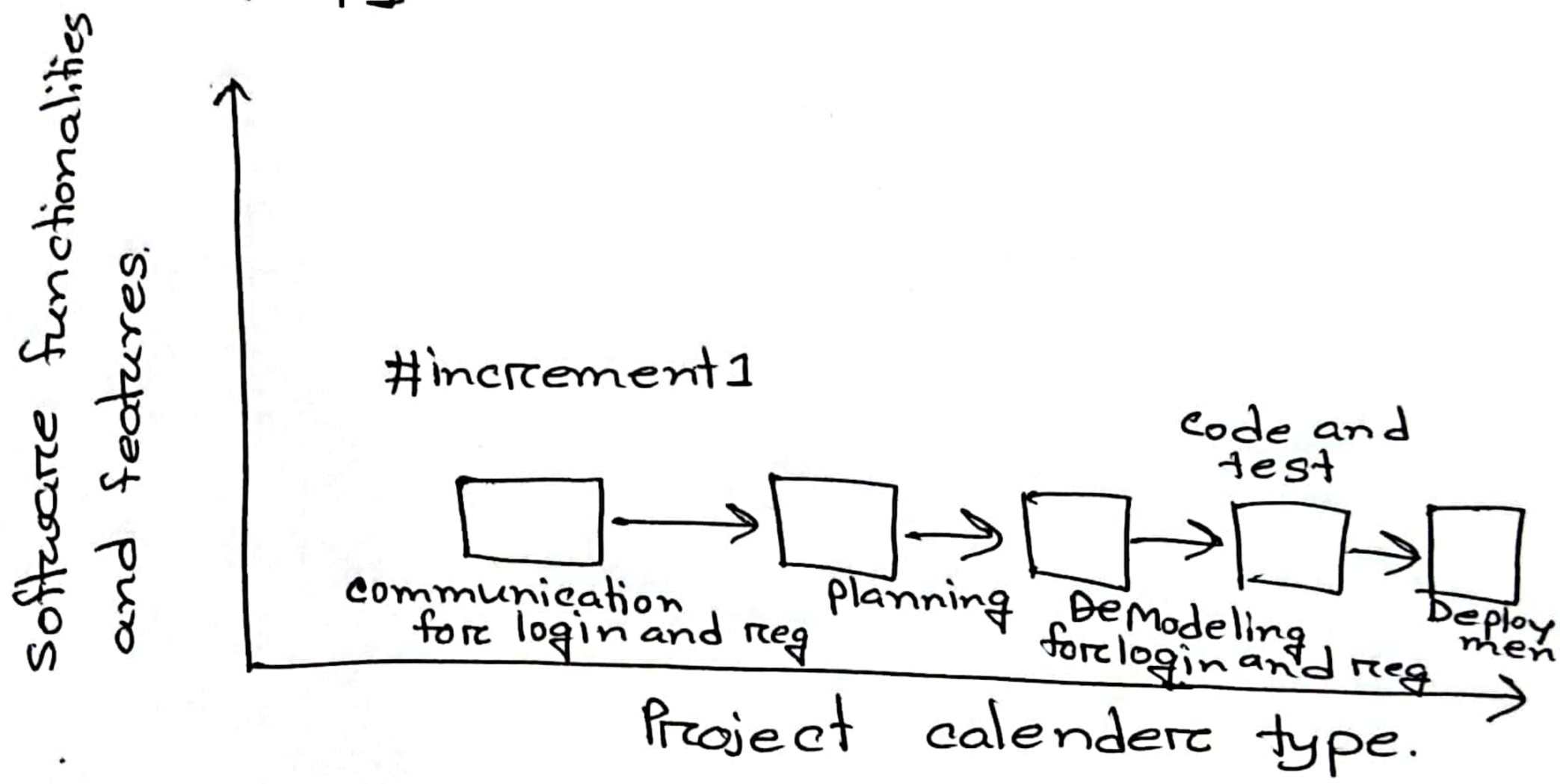


Project calender type

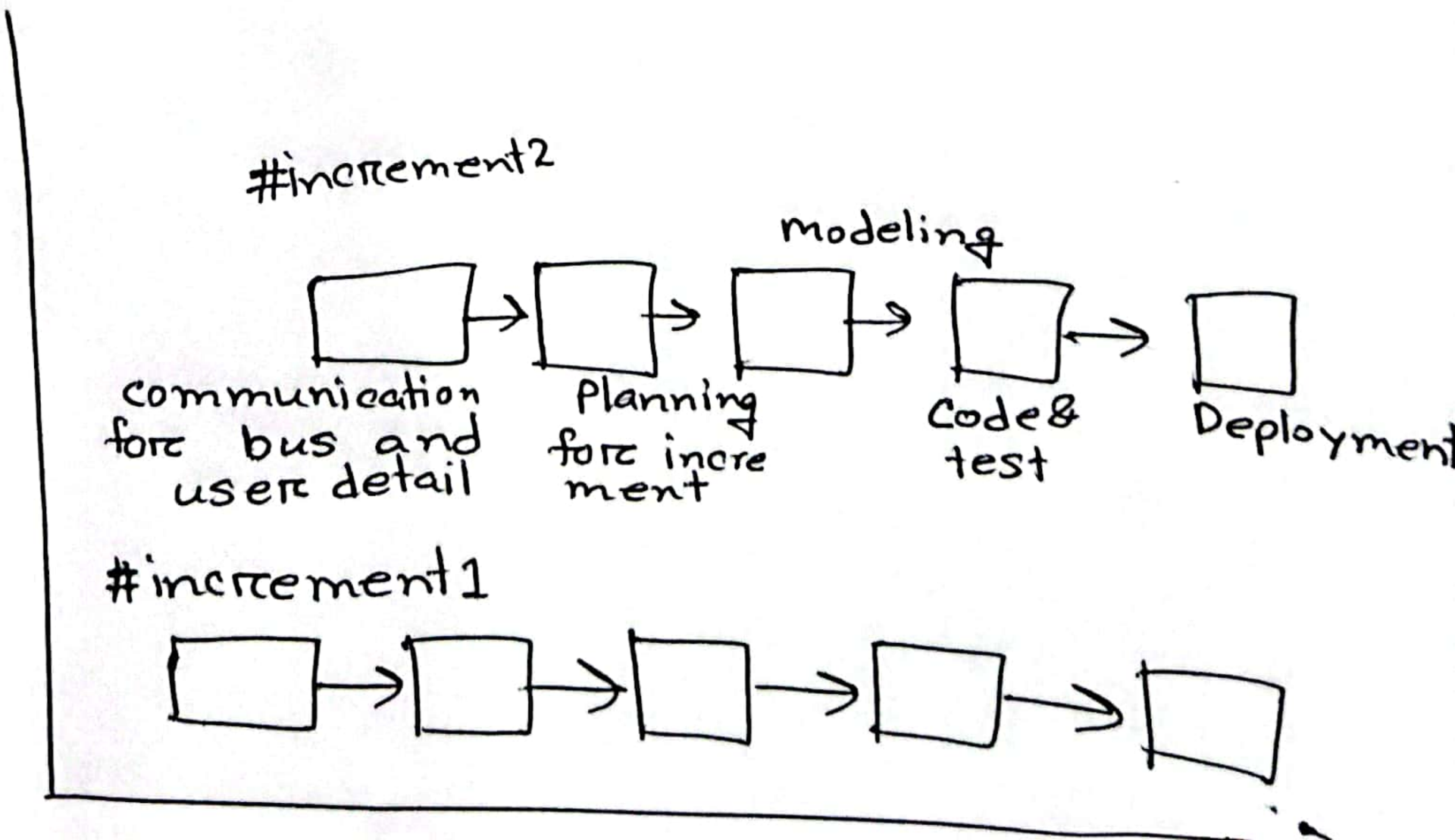
Tama Shil
ID: 342

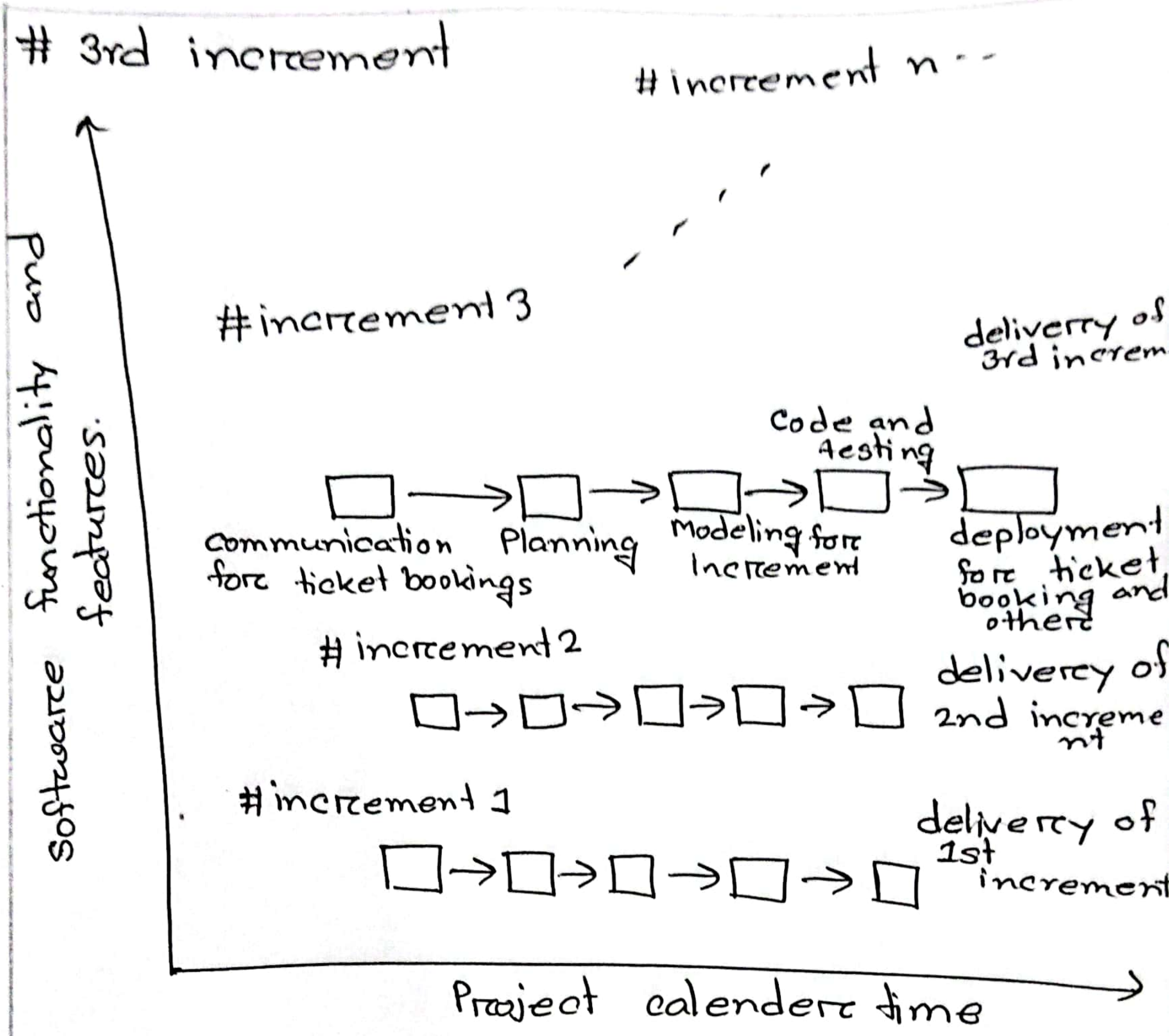
The incremental model for bus-ticket management system-

#increment 1



2nd increment





Here is step by step outline on how the incremental model can be applied on Bus ticket booking management system.

① Requirement gathering

Gathere all initial requirements for the bus ticket booking management system. This includes underestanding needs

of the buses, users and admins.

2) Design and planning

Create high level design and architecture for the system.

3) 1st increment

Based on the requirements the system start the increment. This include -

- User login
- User registration.

4) 2nd increment

Based on the feedback and additional requirements develop second increment. This includes -

- Bus detail module add
- User Add and support details
- Enhancing existing functionalities

5) 3rd increment includes -

- Spelling and grammer check
- Advance face layout
- Booking module implement

The increments will continue until final system is constructed.

Name : Prokash Maitra

Roll : 370

Project : Bus Ticket Management System

Part : Iterative Model

Implementing the iterative Model in a Bus. Ticket Management system involves breaking down the development process into a series of iterative cycles, each focusing on specific functionality and features.

1. Requirement Gathering: Gather initial requirements from stakeholders, including bus operators.

2. Iteration-1 - Basic Ticket Booking: In first iteration, focus on developing the core functionality of ticket booking.

3. Iteration-2 - User Management and Authentication: In this iteration, add user authentication and Management features. Implement user registration,

login and password recovery functionality.

4. Iteration-3-Seat Availibility and Booking optimiz
Enhance the ticket booking system to displ
real-time seat availibility.

5. Iteration-4-Payment Enhancement: Improve
the payment system by adding support
for different payment gateways and methods.

6. Iteration-5-Reporting and Analytics: Implem
reporting features for bus operators and
administrations to track ticket sales, revenue,
and other performance metrics.

Name: Mubashere Adnan Jihad
Roll : 374

Implementing the iterative model in a Bus Ticket Management system.

iteration-7: Refinement and Bug fixex: In this iteration, focus on refining the user interface.

iteration-8: Bus operator integration: Integrate the system with bus operator system

iteration-9: Mobile App Development: Develop a mobile application for passengers to book tickets on the go.

iteration 10: Accessibility & Localization: Enhance the system to support multiple language & consider accessibility features.

iteration-11: Security & scalability: focus on security enhancements to protect user data and prevent unathorized accesl.

iteration-12: Feedback & User testing: Gather feedback from stakeholders, bus operators and end users.