

JEDI-GROUP-IOTA-DEVELOPMENT-FK Team

1. KRISHNA (Group Leader)
2. SARTHAK (Sub Group Leader)
3. SAUMITH
4. ANKIT
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6. DEEPANSHI
7. PRANATHI
8. TANVISHREE
9. CHETANYA
10. SASIDHARA



PRESENTATION AGENDA

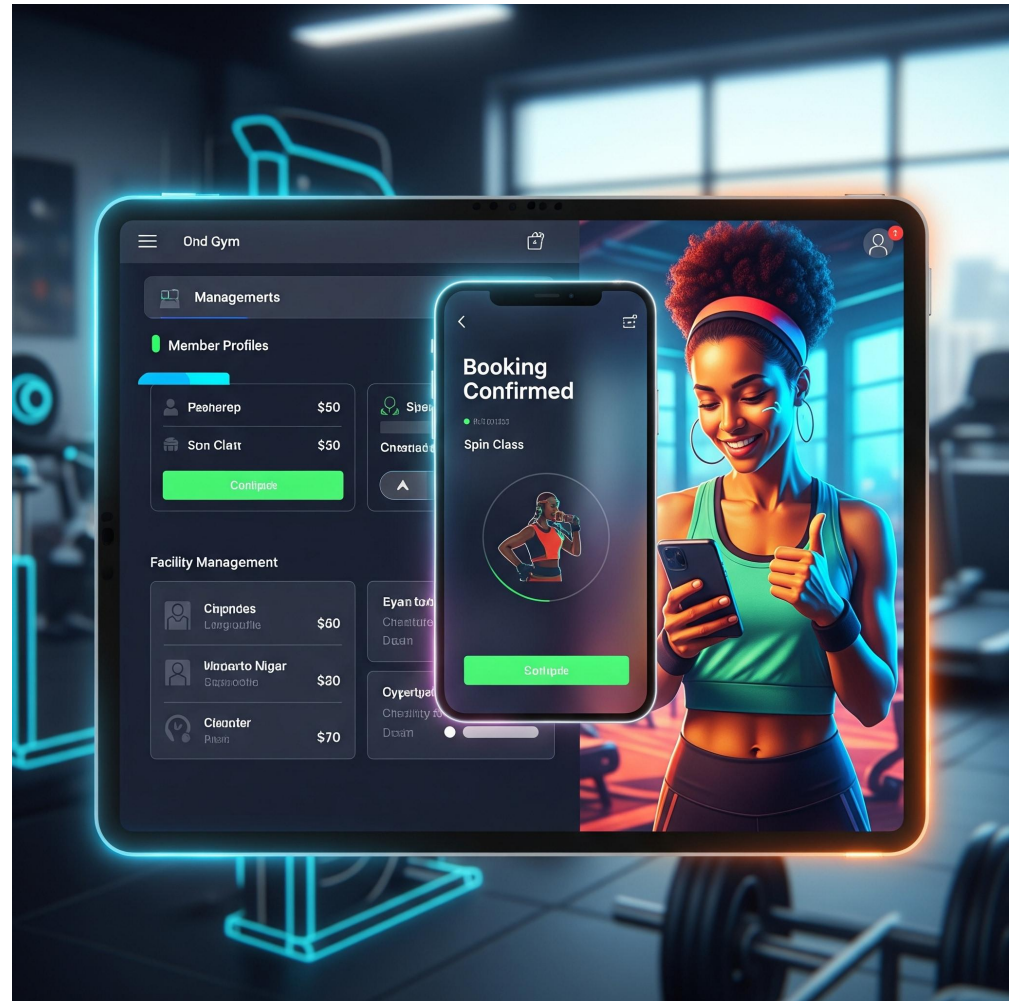


- **Project Goals**
- **Tech Stacks Learned**
- **Development Steps**
- **Challenges Faced**
- **Demo**



Project Goals

To develop a comprehensive Gym Management System utilizing Java and associated tools and technologies, including Spring Tool Suite, MySQL, MySQL Workbench, Git, and Dropwizard. This system will enable gym owners to list their facilities and customers to efficiently book time slots, thereby optimizing the operations of the various gyms managed and authorized by an administrator.

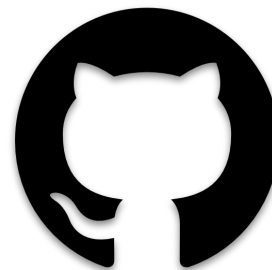


TECH STACKS LEARNED

- STS
- IntelliJ
- Lucidchart
- PlantUML
- Maven



git



ROADMAP



ENGINEERING PRACTICES

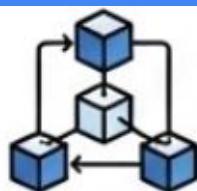
CLEAN CODE
WITH
COMMENTS



VERSION CONTROL
USING GIT



OOP
IMPLEMENTATION



EXCEPTION
HANDLING



MODULARIZATION



DEVELOPMENT STEPS



1. Install and initialize Git, MySQL, and Maven on all laptops.



2. Analyze the problem statement and design the application using UML artifacts such as Use Case Diagrams, Activity Diagrams, and Class Diagrams.



3. Develop a menu-driven Java application utilizing standard Java collections for data storage.



4. Implement JDBC for data persistence and retrieval from the MySQL database.



5. Integrate comprehensive exception handling within the application.



6. Refactor the application to a RESTful service using the Dropwizard framework, incorporating modern Java features such as lambda expressions.



7. Generate comprehensive documentation utilizing the STS documentation tool.

DEVELOPMENT TIMELINE: FROM INITIAL SETUP TO DEMO



21st

Initial Laptop setup and creation of UML artifacts.



22nd

UML review was done and GIT commands were taught.



23rd

Different parts of a JAVA project were taught and Simple menu based Flipfit application using json collections was given as assignment.



27th



Learnt JDBC and also implemented mysql database. Also Exception handling was learnt and implemented



28th

Learned about new java features, created documentation and implemented Dropwizard.

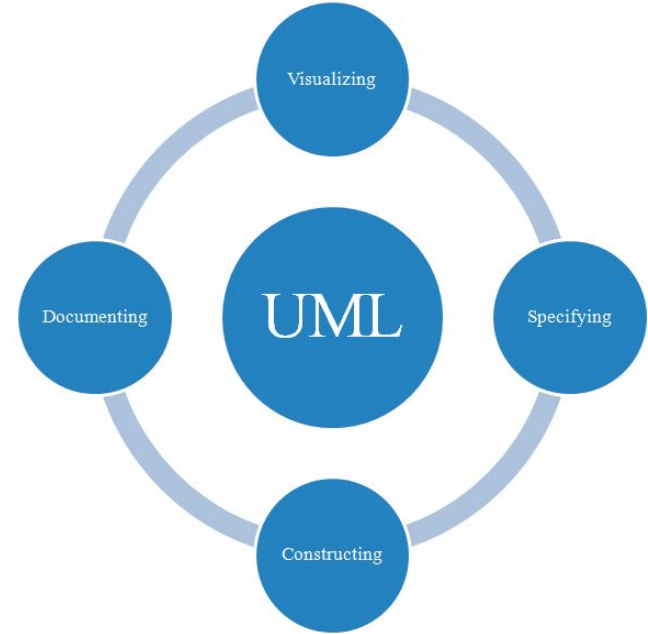
CHALLENGES FACED

Challenge 	Resolution / Key Learning (Solution) 
Unexpected Bugs	Implemented comprehensive exception handling and adopted modularization to isolate issues, leading to cleaner, more stable code.
New Technologies	Rapidly upskilled on frameworks like Dropwizard and tools like PlantUML, demonstrating the team's adaptability and commitment to modern standards.
Tight Deadlines	Leveraged efficient version control (Git) and clear task delegation to maintain momentum and successfully meet all project milestones.
Team Collaboration	Established clear communication channels and defined roles (Group Leader, Sub Group Leader) to ensure aligned efforts and effective teamwork.



DEMO

- GIT REPO
- UML Artifacts



Thank You!

