PIP4004 - INTERNSHIP

Review-3 Presentation Software Development

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About Company or Organization

Company Overview

- **About Test Yantra**: A global IT services company specializing in software testing and quality assurance.
- **Establishment**: Founded with the vision to deliver reliable and efficient QA solutions.
- Presence: Offices across various regions, serving clients worldwide.



About Company or Organization

Products & Services

- **Software Testing & QA**: Comprehensive testing solutions including manual, automation, performance, and security testing.
- Consulting & Training: Expert guidance on testing methodologies, tools, and best practices.
- **Customized Solutions**: Tailored services to meet specific client needs across diverse domains.



About Company or Organization

Clients & Partnerships

- Client Base: Serves startups, mid-sized companies, and large enterprises in sectors like banking, healthcare, and e-commerce.
- **Key Partnerships**: Collaborates with leading technology providers to stay at the forefront of testing innovation.
- **Reputation**: Known for quality-driven approaches and a proven track record of delivering on-time, cost-effective solutions.



Working domain or the technology

Backend: Django (Python Framework)

- Features: MTV architecture, ORM for database handling, in-built admin panel, secure session management.
- Importance: Streamlines backend development, integrates easily with databases, and accelerates rapid deployment.



Working domain or the technology

Frontend: HTML, CSS, Bootstrap

- **Features**: Semantic page structure (HTML), responsive design (Bootstrap), custom styling (CSS).
- Importance: Enhances user interface and experience, ensuring compatibility across devices.



Working domain or the technology

Database: SQLite

• Features: Lightweight, serverless, built-in support in Django.

• Importance: Ideal for development/testing, simplifies data storage without complex setup.



About your team and reporting Manager

Project Manager (PM)

Oversees the project timeline, budget, and scope.

Acts as the main point of contact for stakeholders and higher management.

Technical Lead (Tech Lead)

Guides the technical direction of the project.

Mentors developers and ensures coding standards and best practices.



About your team and reporting Manager

Developers

Responsible for writing and maintaining code.

Work in close collaboration with the Tech Lead and QA.

Quality Assurance (QA) / Testers

Verify that the software meets requirements.

Perform functional, integration, and regression testing.



Challenges Faced in Internship

High Competition:

With many qualified applicants vying for limited spots, it can be challenging to stand out from the crowd.

Specific Skill Requirements:

Test Yantra may be looking for proficiency in particular programming languages or frameworks (e.g., Python, HTML, CSS, JavaScript, Django, React). Gaps in these skills could make the application process more challenging



Challenges Faced in Internship

Networking Opportunities:

Sometimes, not having strong industry connections or referrals can make it harder to get noticed during the application process.



Objectives of the work

Enhance User Experience: Develop and integrate features that make web applications more intuitive and responsive for end-users

Improve Code Quality & Efficiency: Write clean, maintainable code using Python, Django, React, etc., ensuring scalability and ease of future enhancements.



Objectives of the work

Operational Platform: The developed features and improvements become part of the live software used by clients, enhancing their daily operations.

Training and Documentation: Your work, including code and documentation, becomes a resource for onboarding new team members and for future troubleshooting and enhancements.





Project Title: Movie Booking Platform



Objective

 To build a web-based platform that allows users to browse movies, check showtimes, book tickets, and manage bookings online in a user-friendly and efficient manner.





Problem Statement

 Traditional movie ticketing involves standing in queues or using outdated websites with limited functionality. There's a need for a modern, scalable, and user-centric solution that automates and simplifies this process for both users and cinema administrators.



Proposed Solution

- A full-stack web application developed using Django (Python) that includes:
- Real-time movie listing and seat availability
- Secure user login and account management
- Admin panel to manage movies, bookings, and user activity
- A clean, responsive user interface for easy navigation and booking



Technology Stack

• Frontend: HTML, CSS, Bootstrap

Backend: Django (Python)

• Database: SQLite

• Tools: Git, VS Code, Virtual Environment, Postman (optional)





- User Management
 - Sign-up, login, password management
- Movie Management
 - Admin adds/edits/deletes movies and showtimes
- Seat Booking System
 - Dynamic seat selection with real-time availability



- Project Modules
- Booking Confirmation
 - Generates ticket summary after payment (mock)
- Admin Dashboard
 - Manage all data (users, movies, bookings)



- Development Phases
- Planning & Requirement Gathering
- Designing Database and Wireframes
- Developing Backend (Django Models, Views)
- Frontend Integration
- Testing & Debugging
- Documentation & Deployment





- Manual and functional testing of each module
- Ensured that seat booking, login flow, and admin actions worked seamlessly





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Outcomes

- Developed a working, modular web application
- Simplified the ticket booking process
- Created a foundation that can be scaled and deployed



*** Future Scope**

- Integrate online payment gateways
- Add movie trailers, ratings, and reviews
- Expand support for multi-theater and location-based searches
- Deploy on a cloud platform for real-world use

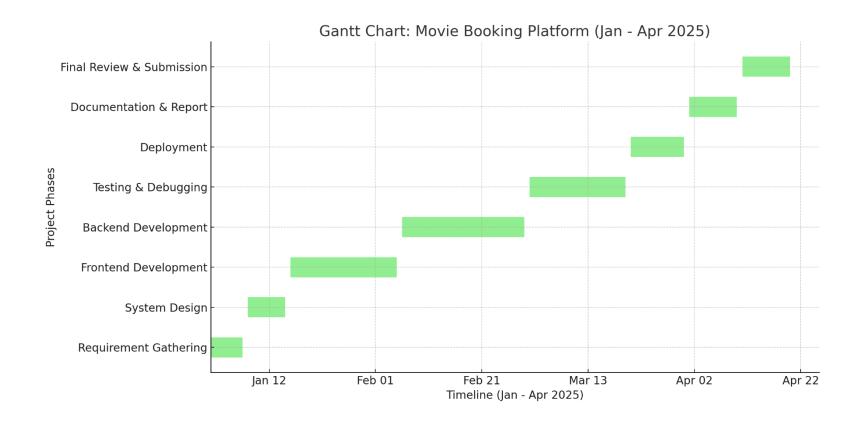


My Role

- Led the development as a Full-Stack Developer
- Designed database schema, built backend logic, and integrated front-end
- Managed project structure and testing process



Gantt Chart:





Internship Road Map

Note: Write in the below table what u will be achieving in each review

Understand the company processes and project scope. Complete basic coding tasks or documentation to familiarize with codebase.	Demonstrate improved coding standards, problem-solving, and understanding of project requirements.	Showcase completed work, lessons learned, and plan for next steps or handover.



Literature Review

- Why Python & Django for E-Commerce?
- Fast & Secure: Built-in authentication, ORM, and security features (CSRF, SQL Injection protection).
- Scalability & Modularity: Supports large product catalogs & user traffic with caching and microservices.
- Rapid Development: Pre-built admin panel, Django REST Framework (DRF) for APIs, and database integrations.



Literature Review

- Key Technologies for Full Stack E-Commerce:
- Frontend: React.js, Tailwind CSS for dynamic and responsive UI.
- Backend: Django + Django REST Framework (DRF) for handling business logic & APIs.
- Payments & Auth: JWT, OAuth, Stripe, Razorpay for secure transactions.



Proposed System / Work

- Proposed System:
- Django Framework, Python, Web Technologies, SQL
- Work Assigned:
- To create Website using Django Framework along with linking additional Json file and Bootstrap to it.



Problem Statement

 Current movie ticket booking systems are either outdated or lack real-time features, causing inconvenience for users and inefficiency for theater management. There is a need for a centralized, responsive platform that enables users to book tickets with live seat availability while allowing admins to manage movies, shows, and bookings seamlessly.



System Requirements

- System with Idle Python version 3.
- System with suitable VsCode and latest version.
- Latest Django framework installation.
- System suitable with activation of virtual environment.
- System suitable to handle React Configuration and other API repostories.



Advantages of Proposed System/Work

- Proposed System:
- Easy readable and understandable.
- Friendly user interface.
- Huge collection of libraries.
- Easy implementation of API keys and Repositories.



Github Link

• https://github.com/kaushik1611-rtr/internship





Thank you!!

