

Software Engineering Laboratory - UE20CS303

Batch 14

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Week 4 - Case Study Unit 2

Problem statement 1

1. What could cause a miss in your deadline?

The following issues can cause a miss in the deadline

1. Unexpected bugs and errors that take a long time to fix.
2. Leaves of absence by the members of the development team due to unforeseen circumstances.
3. Interface design being sub-optimal and requiring fine tuning before a release.

2. What will keep your project on time?

We can ensure that the project is on time by making sure that the development team is kept updated on all aspects of progress and is well aware of the product backlog. A steady schedule will allow the team to complete the project by the deadline.

3. What does this project need that you don't have?

The project requires insights from the consumer point-of-view to cater to their needs and bring in features that are currently unavailable in the market. The project also requires sufficient funding to procure the necessary resources such as domain name.

4. What do you already have that this project needs?

We have a team of skilled developers who are well-versed in all the required concepts and techniques ranging from UI/UX design to AI/ML implementation for recommender systems.

5. What are you worried about?

We are worried about facing unexpected hurdles during the development phase such as unavailability of funding or developers or delays in meeting deadlines. We are also skeptical about the response of the consumers and the time it will take for our project to be deemed as successful.

6. What are you excited about?

We are excited to bring about a new perspective in the software product market. We intend to create a more accessible and flexible product range where our customers' needs will be put first.

7. What could go wrong with this project?

The project may not have a positive response within the market due to the lack of awareness and its limited use.

8. What could go right with this project?

The project could become an overnight success and may even set an industry standard for all subsequently created product delivery platforms.

9. Risks of the project

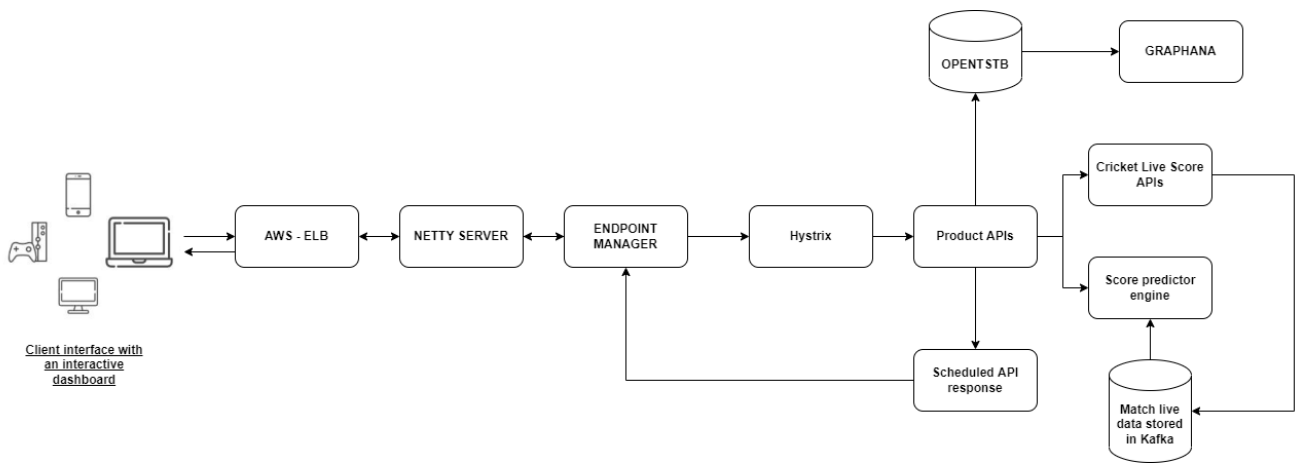
1. Loss of funding due to poor market response.
2. Dearth of manpower to handle a project of this scale.
3. Being unsatisfactory in terms of quality towards its target audience.

10. Successes of the project

1. Becoming a success and receiving more investment towards the project.
2. Creating more employment opportunities owing to the number of people required to handle and scale the project.
3. Becoming a household name and an industry standard.

Problem statement 2

Flowchart



Tech Stack/Services

ELB

Used as a HTTP load balancer. It automatically distributes load traffic across multiple targets and virtual appliances.

Netty Server

A client server framework used for backend development and endpoints that connect to microservices.

Hystrix

Used for latency and fault tolerance between microservices. Improves overall resilience of the system.

Cricket Live Score APIs

Used to retrieve live score data via web scraping tools such as Scarpy.

Score Predictor Engine

A model trained for the score prediction using the data stored in a kafka database.

API monitoring

- OPENTSTB: Scalable Time Series Database Store and serve massive amounts of time series data without losing granularity.
- Graphana: Gives readymade dashboards for server performance metrics.