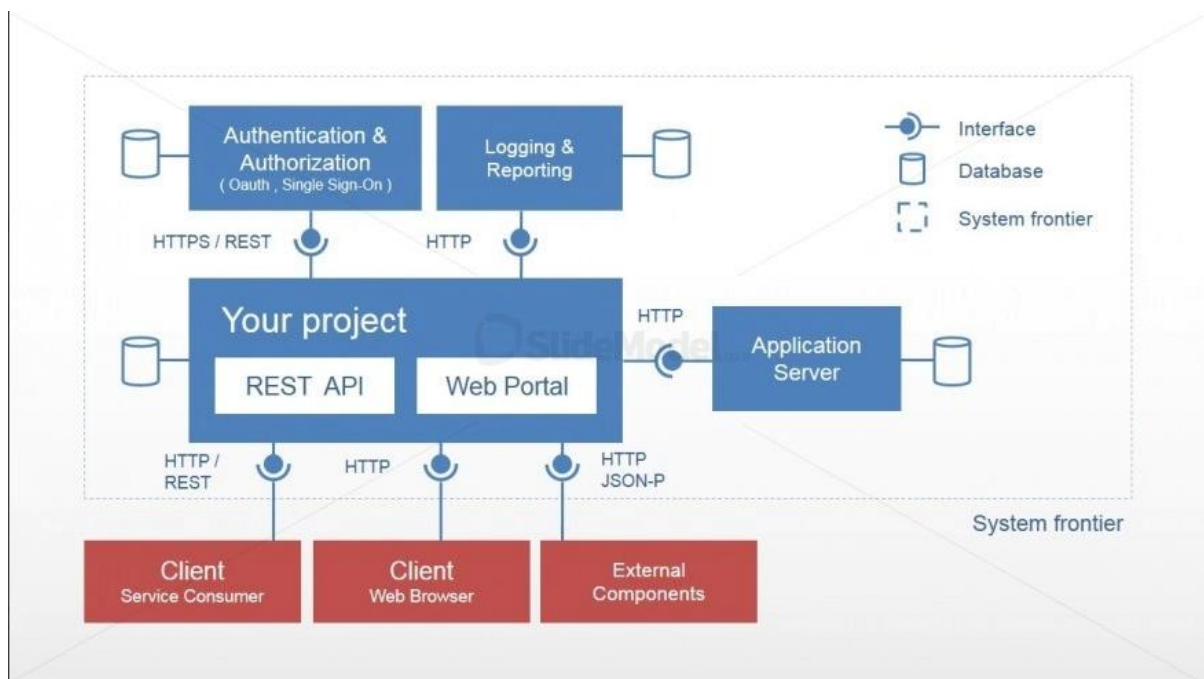


Test Management - QA

Exercise

Introduction

"We are going to kick a new application development project off based on the following software architecture. You have been assign as Test Manager for this project."



Question Block 1

GIVEN THE FOLLOWING INFORMATION:

- **Business mission:** Web application to present our brand's manufactured products to our retailers.
- **Business context:** Our retailers, properly identified can browse our products catalogue including product reference, price, fully detailed information and media. To purchase, for now, they will need to contact by phone, email or through a web form included in the page.
- Some partners are re-selling our products in markets our own brand is not present accessing the catalogue via our **REST API**.
- **External components** are used to retrieved prices and media, coming from 2 internal services developed by other teams of our company.
- 60% of our **profit** comes from our retailers
- 40% of our **profit** comes from our re-sellers
- **Technologies:**
 - Scalable cloud-native architecture will be used to develop and deploy our application (AWS)
 - ReactJS FE instances
 - NodeJS BE instances
 - Amazon RDS for database
 - Authentication service to be discussed
 - Logging and reporting services not defined yet
- 200 **concurrent users** expected (max.)
- We must be **LIVE in 3 months**.
- We will build 2 teams (7 devs + 7 devs) + (1 FE, 1 BE + DB)
- Budget is not unlimited but there is **room to negotiate QA/Testing resources** regarding profiles and tools.

1.1. Which will be the essential points of your test strategy?

1.2. Which will be the main challenges for testing in this project?

1.3. How would you approach the test automation strategy in this project?

1.4. How would you approach the integration of automated tests into the project CI/CD pipelines?



Question Block 2 - Methodology
2.1. Which methodologies would you recommend for this project development?
2.2. Why?

Question Block 3 - Test Team
3.1. How would you configure the test team for this project?
3.2. Which skills would you consider essential for your team members to have?
3.3. Which mindset and attitudes would you look for in your team members?

Question Block 4 - Test Process
4.1. How would you identify the test scenarios or test cases needed?
4.2. How would you keep traceability between the test scenarios/cases and requirements?
4.3. How would you split the testing responsibilities between developers and testers?

Question Block 5 - Tools
5.1. Which tools would you use for Test Management?
5.2. Which tools would you use for Performance Testing?
5.3. Which tools/frameworks would you use for API testing and API automation
5.4. Which tools/frameworks would you use for FE testing and FE automation?
5.5. Which other tools would you use?