Test Strategy Document

Team 33 - InHobi

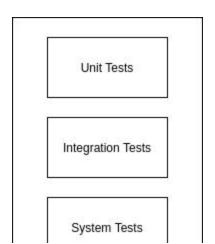
<u>Scope</u>

| REVIEWER | Dev Team |
|-----------|-------------|
| VALIDATOR | Mr. Bhupesh |

| Milestone: Use Case | Test Type | Due Date | Testing Mechanism |
|-----------------------------------|---|----------|--|
| Authentication: Authentication | Unit Testing: OAuth Modules | R1 | Validating POST API Response on DB |
| Authentication: Authentication | Integration Testing: OAuth Modules | R1 | Validating GET/POST API Response on React, DB |
| Authentication: Authentication | System Testing: Sign Up/Login Functionality | R1 | Manual verification of the functionality on the Development Server |
| LMS Core: Assignments | Unit Testing: Add Assignments | R1 | Validating POST Request Response on DB |
| LMS Core: Assignments | Integration Testing: View Assignment | R1 | Validating GET/POST API Response on React, DB |
| LMS Core: | System Testing: | R1 | Manual verification |

| Assignments | Upload Assignment Submission | | of the functionality on the Development Server |
|-------------------------|--|----|--|
| LMS Hosting | System Testing: DigitalOcean/Herok u DNS | R1 | Validating GET API Response on VM's Public DNS |
| LMS Core: Courses | Unit Testing: Add Course Material | R1 | Validating POST Request Response on DB |
| LMS Core: Courses | Integration Testing: View Course Material | R1 | Validating GET/POST API Response on React, DB |
| LMS Core: Courses | System Testing: Unlock Course Contents | R2 | Manual verification of the functionality on the Development Server |
| R1 MVP | Acceptance Test | R1 | Manually on the Development Server by the Client. |
| LMS Core: Instructor | Unit Testing: Add Instructor | R2 | Validating POST Request Response on DB |
| LMS Core: Instructor | Integration Testing: View Instructor Profile | R2 | Validating GET/POST API Response on React, DB |
| LMS Core: Instructor | Unit Testing: Rate/Review Instructor | R2 | Validating POST Request Response on DB |
| LMS Core: Instructor | Unit Testing: Rate/Review Instructor | R2 | Validating POST Request Response on DB |

| LMS Core: Groups | Unit Test: User Feed | R2 | Validating POST Request Response on DB |
|------------------|---|----|--|
| LMS Core: Groups | System Feed: User Feed | R2 | Manual verification of the functionality on the Development Server |
| LMS Core: Forum | Unit Testing: Add Discussion | R2 | Validating POST Request Response on Postman |
| LMS Core: Forum | Unit Testing: Add Post To Discussion | R2 | Validating POST Request Response on Postman |
| LMS Core: Forum | Unit Testing: Delete & Update Posts & Discussions | R2 | Validating POST Request Response on Postman |
| GetStream API | Integration Testing: Get Feed | R2 | Validating POST Request Response on Postman |
| GetStream API | Integration Testing: Push Feed | R2 | Validating POST Request Response on Postman |



Test Approach

- Refer to the diagram for the levels of testing followed.
- Unit Tests were implemented and validated by the member writing the functionality.
- Integration Tests were conducted by Arjun, Chaitanya.
- System Tests were conducted by Adarsh, Joseph.
- Acceptance Tests were conducted by the Client.

Test Environment

- <u>Unittest</u> library used for Unit Tests for Django.
- PHP Unit framework used for Unit Tests for LMS.

Testing Tools

- Production Tests for R1 were written using Gitlab Pipelines.
- Jenkins used for CI/CD.
- Postman used for all backend functionality testing (API Request Issuing)