Testing Plan

Serdachny Hockey iOS Application

Prime Software

University of Regina

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1 Introduction

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project Serdachny Hockey iOS Mobile App.

The plan identified the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

2 Testing Strategy

2.1 Test Type

In the Serdachny Hockey iOS Mobile App, there are three types of testing should be conducted.

1. Integration Testing Individual software components are combined and tested as a unity.
2. System Testing: Conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements.
3. API Testing: Test all the APIs create for the software under-tested.

2.2 Scope of Testing

2.2.1 Feature to be Tested

All the features of the Serdachny Hockey iOS Mobile App which were defined in the software requirement document need to be tested.

Module Name	Applicable Roles	Description
Registration	Customer	**Customer:** A customer can create a new account. He or She can only create only one account at a time.
Login	Customer	**Customer:** A customer can log into the system after providing the correct username and password.
Change Password	Customer	**Customer:** A customer can change password of only his account.

Edit Profile	Customer	**Customer:** A customer can edit his account profiles for an existing account.
Log out	Customer	**Customer:** A customer can log out of the current logged in account.
Play Public Videos	Customer	**Customer:** A customer can play public videos using his/her own account.
Play Protected Videos	Customer	**Customer:** A customer can play protected videos using his/her own account.
Post Videos	Customer	**Customer:** A customer can post new videos using his/her own account.
Purchase Items	Customer	**Customer:** A customer can purchase items from the edge store on the home screen.
Browser Programs	Customer	**Customer:** A customer can browse all the programs provided by the camp.
Play Free Videos	Customer	**Customer:** A customer can play free video tips on the media screen.
Contact Camp	Customer	**Customer:** A customer can contact the camp via social media or phone call.
Leave Feedback	Customer	**Customer:** A customer can send a feedback to the camp directly through the feedback section on the contact screen.
Search Filter	Customer	**Customers:** A customer can search for videos by inputting keywords on the media screen.

2.2.1 Feature not Tested

These features are not be tested because they are not included in the software requirement specs:

1. Hardware Interfaces
2. Software Interfaces

3. Database Logical
4. App Security and Performance

2.3   Risk and Issues

Risk	Mitigation
Team members are lack of required skills for iOS App testing	Plan training to skill up the group members
The project schedule is tight; It is hard to complete the whole project on time	Set test priority for each of the test activity
Meeting limitation due to COVID-19	Irresistible situation
Lack of group work due to COVID-19	Irresistible situation
Team members are lack of required skills for testing AWS based end	Plan training to skill up the group members
The application was not able to demonstrate to the customers due to closure of the camp	Irresistible situation

2.4   Test Logistics

2.4.1   Who will Test?

The project should use outsource members as the tester to catch up on the schedule.

2.4.2   When will we Test Occur?

The tester will start the test execution when all the following inputs are ready

- Software is available for testing
- Test Specification is created
- Test Environment is built
- Enough human resource for testing

3 Test Objectives

The test objectives are to verify the functionality of the Serdachny Hockey iOS Mobile App, the project should focus on testing the logical operation such as Account Management, Videos Play Back, Data Retrieval, etc. to make sure all these operations can work normally in a real-life environment.

4 Test Criteria

4.1 Suspension Criteria

If the team members report that there are half of test cases failed, suspend testing until the development team fixes all the failed cases.

4.2 Exit Criteria

Specifies the criteria that denote **successful completion** of a test phase

- **Run rate** is mandatory to be **100%** unless a clear reason is given.
- **Pass rate** is 80%, achieving the pass rate is **mandatory**.

5 Resource Planning

5.1 System Resources

No #	Resources	Description
1	**Server**	Need a host which can run AWS backend server
2	**Testing Tools**	Need to determine which testing tools have the ability to fulfill the tasks
3	**Network**	Need to set up a wireless network to have access to the Internet
4	**Computers**	macOS systems only

5.2   Human Resources

No #	Role	Tasks
1	**Test Manager**	1. Manage the whole project 2. Define project directions 3. Acquire appropriate resources
2	**Testing**	1. Identifying and describing appropriate test techniques/tools/automation architecture 2. Verify and assess the Test Approach 3. Execute the tests, Log results, Report the defects. 4. Outsourced members
3	**Developer in Test**	Implement the test cases, test program, test suite, etc.
4	**Test Administrator**	1. Builds up and ensures test environment and assets are managed and maintained 2. Support Tester to use the test environment for test execution
5	**SQA members**	1. Take in charge of quality assurance 2. Check to confirm whether the testing process is meeting specified requirements

6   Testing Environment

The Test Environment should be set up as the figure below.
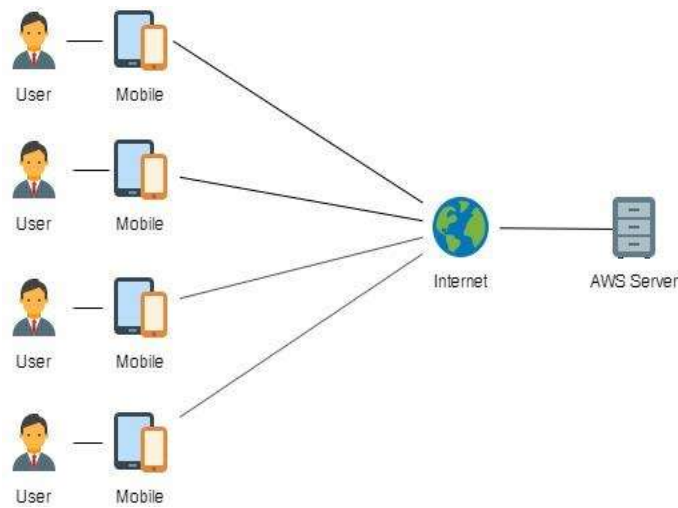
7   Schedule & Estimation

7.1   Task Estimation

Task	Members	Estimate time
Create the test specification	Tester Designer	100 hours
Perform Test Execution	Tester	100 hours
Test Report	Tester	10 hours
Test Delivery	N/A	20 hours
Total	N/A	**230 hours**

8   Test Deliverables

Test deliverables are provided as below

8.1   Before Testing Phase

- Test plans document
- Test cases document

- Test design spec

8.2   During Testing Phase

- Testing tools
- Simulators
- Test data (videos)
- Test matrix
- Error and execution logs

8.3   After the Testing

- Testing results (reports)
- Defect reports
- Test procedures
- Release notes
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