**Test Plan**

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|  | Yalla kora  Test Plan |

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| --- | --- |
| Author |  |
| Version | 0.1 |
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**1        Document Control**

* **1.1 Version History**

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| **Version** | **Date** | **Author** | **Description** |
| 0.1 | 18/11/2021 |  | Draft |
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* **1.2 Key Reviewers**

|  |  |  |  |  |
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**3        Introduction**

* **3.1 Purpose**

This document details test scope, requirements, what needs to be tested, test phases and types, entry & exit criteria, roles & responsibilities, deliverables, defects classification, environments and tools required to efficiently conduct end to end testing for Yalla kora application.

The key objectives of developing a Test Plan document are to:

* Describe the testing scope, what is planned to be tested, test phases and types, test environments, defects classification and agreed entry & exit criteria.
* Describe the plan followed to assure the behavior of impacted systems is working as intended, determine the quality of impacted systems and their ability to interface with other systems through the application of formal test processes and controls.
* **3.2 Glossary of Terms**

The Glossary of Terms section describes commonly understood Vodafone or industry recognised acronyms and terms that are used within this document.

|  |  |
| --- | --- |
| **Term** | **Description** |
| E2E | End to End |
| ST | System Test |
| SIT | System Integration Test |
| ST | System Test |
| UAT | User Acceptance Test |
| TC | Test Case |
| US | User Story |

* **3.1 Reference Documents**

Reference Documents in the table below lists any documents that have been used as inputs for the content of this document.

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Document Title** | **Version** | **Location** |
|  |  |  |  |

**4        Project Overview**

* **4.1       Background**

 Yalla kora is a mobile application that enables customers to view the dates and times of old, current and upcoming football matches, and the matches score for all champioships, it also displays football and other sports news in addition to providing users with extra features, like adding favorites or viewing more details and statistics about a specific football match.

**5        System Testing (ST)**

* **5.1 Objective of ST**

Test various changes on components with the aim of early detection of any defects which will lead to more stable release/build on E2E phase and smoother testing

* **5.2 Scope**
* **5.2.1  Manual Test**

Manual testing for each new user story delivered in the app to raise all possible defects early before E2E testing of the app features/USs

* **5.2.2  Automated Test**

Preparation for automation scripts for delivered user stories to be executed during E2E test phase

* **5.2.3  Browsers/Devices**

Testing is to be performed on Android and IOS devices as per agreed versions during sprint planning

* **5.3 Roles & Responsibilities**

This table below identifies the stakeholders for System Testing, Roles & Responsibilities:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Team** | | **Role** | | **Responsibilities** | | **Contact** | |
| QC Team | | Testing | | Responsible for system testing execution | |  | |
| Development Team | Development | | Responsible for system testing bug fixing | |  | |

Table 1 –System Testing Roles & Responsibilities

* **5.4 Deliverables**

The table shown below outlines the documents required to be delivered by Testing Team for this phase:

|  |  |
| --- | --- |
| **Deliverable name** | **Deliverable Description** |
| **Detailed ST Test Plan** | Document including test plan, test scope, test cases, environments and tools. |
| **Daily ST Reports** | Test Reports showing test progress, defect open by severity and team,  mains issues & risks |
| **ST Test Completion** | Test result, status for each test case and defects raised/outstanding against  each test. Test Env. & Tools used |

Table 2 – ST Deliverables

* **5.5 Entry & Exit Criteria**

The table below identifies the ST Entry Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| Unit Testing Completion Report | Development Team |
| Agreed ST test plan and test cases | QC Team |
| Agreed environment for testing | Development & QC Team(s) |

Table 3 - ST Entry Criteria

The table below identifies the ST Exit Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| Execution of all the planned ST test cases. Failed test-cases are not impacting core functionality. | Quality Assurance & Testing Team |
| No open Critical and Major defects, less than 10 open Minor defects.  Any remaining defects have delivery dates agreed. | Quality Assurance & Testing Team |
| All defects raised during the test phase are updated with their latest status. | Quality Assurance & Testing Team |
| System Testing Completion Report | Quality Assurance & Testing Team |

Table 4 – ST Exit Criteria

**6        End to End Testing (E2E)**

* **6.1 Objective of E2E**

End to End testing is to validate whether the flow of business requirements from start to finish is behaving as expected. The purpose of performing end-to-end testing is to identify system dependencies and to ensure that the data integrity is maintained between various system components and systems.

The application is tested for critical functionalities such as communicating with the other systems, interfaces, database, network, and other applications.

* **6.2 Scope**
* **6.2.1  Manual Test**

Manual testing for E2E flow for all user stories delivered

* **6.2.2  Automated Test**

Automation testing execution for E2E flow for the application

* **6.3 Roles & Responsibilities**

This table below identifies the stakeholders for End to End Testing, Roles & Responsibilities:

|  |  |  |  |
| --- | --- | --- | --- |
| **Team** | **Role** | **Responsibilities** | **Contact** |
| **QC Team** | Testing | Responsible for E2E testing execution |  |
| **Development team** | Development | Responsible for E2E bug fixing |  |

Table 5 –E2E Test Roles & Responsibilities

* **6.4 Deliverables**

The table shown below outlines the documents required to be delivered by Testing Team for this phase:

|  |  |
| --- | --- |
| **Deliverable name** | **Deliverable Description** |
| **Detailed E2E Test Plan** | Document including test plan, test scope, test cases, environments and tools |
| **Daily E2E Reports** | Test Reports showing test progress, defect open by severity and team,  mains issues & risks |
| **E2E Test Completion** | Test result, status for each test case and defects raised/outstanding  against each test. Test Env. & Tools used |

Table 6 – E2E Test Deliverables

* **6.5 Entry & Exit Criteria**

The table below identifies the End to End Test Entry Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| <System Testing/System Integration Testing> Completion Report & Traceability Matrix agreed and Signed off | Development and QC Teams |
| Clearly defined business process documents for all the processes mentioned in scope | Business Analyst/Product Owner |
| Agreed Environment for testing and support mechanism during test execution life cycle | Development and QC Teams |
| Agreed and Signed off E2E test plans and test cases | QC Team |

Table 7 – E2E Test Entry Criteria

The table below identifies the End to End Test Exit Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| Execution of all the planned E2E test cases. Failed test-cases approved by  Product / Business Test Lead and not impacting core functionality. | Quality Assurance & Testing Team |
| No open Critical and Major defects, less than 10 open Minor defects.  Any remaining defects have delivery dates agreed with Product / Business. | Quality Assurance & Testing Team |
| All defects raised during the test phase are updated with their latest status. | Quality Assurance & Testing Team |
| E2E Testing Completion Report | Quality Assurance & Testing Team |

Table 8 – E2E Test Exit Criteria

**7        User Acceptance Testing (UAT)  
  
 7.1 Objective of UAT**UAT testing is to confirm the system is ready for operational use. UAT is performed by product owner and line of business to validate the readiness of the system.

* **7.2 Scope**
* **7.2.1  Manual Test**

Manual UAT testing for E2E flow for the app

* **7.3 Roles & Responsibilities**

This table below identifies the stakeholders for UAT Testing, Roles & Responsibilities:

|  |  |  |  |
| --- | --- | --- | --- |
| **Team** | **Role** | **Responsibilities** | **Contact** |
| **PO/Business** | Testing | Responsible for UAT testing |  |
| **Development team** | Development | Responsible for UAT issues/comments fixing |  |
| **QC Team** | Testing Support | Responsible for UAT testing support |  |

* **7.4 Deliverables**

The table shown below outlines the documents required to be delivered by Testing Team for this phase:

|  |  |
| --- | --- |
| **Deliverable name** | **Deliverable Description** |
| **UAT Test Completion Report** | Test result, status for each test case and any outsanding issues/comments |

Table 6 – E2E Test Deliverables

* **7.5 Entry & Exit Criteria**

The table below identifies the End to End Test Entry Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| E2E Test completion Report | QC Team |
| Agreed and planned test scenarios for UAT | QC and Business teams |
| Agreed Environment for testing and support mechanism during UAT execution | Development, QC and Business Teams | |

The table below identifies the End to End Test Exit Criteria:

|  |  |
| --- | --- |
| **Criteria** | **Responsibility** |
| Any remaining issues/comments have delivery dates agreed with Product / Business | Quality Assurance & Testing Team |
| UAT Test Completion Report | Quality Assurance & Testing Team |

Table 8 – E2E Test Exit Criteria

**8        Test Environments**

Testing is to be executed on Testing and Staging Environments

**9        Test Design**

* **9.1 ST Test Cases**

The following table describes the ST test cases that will be tested for each of the component in scope for <Yalla kora>:

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Test Case Name** | **Description/Goal** | **Planned Start Date** |
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Table 9 – ST Test Cases

* **9.2 E2E Test Cases**

The following table describes the E2E test cases that will be tested for each of the component in scope for <Yalla kora>:

|  |  |  |  |
| --- | --- | --- | --- |
| **Component** | **Test Case Name** | **Description/Goal** | **Planned Start Date** |
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Table 10 – E2E Test Cases

**10      Test Control**

* **10.1                 Test Reporting**

A set of reports were defined to be used by the different teams during each Test Phase.

- Daily Test Reports

- Test Completion Reports

Reporting activities are a key factor for enabling an efficient project management.

The tables below outline the key metrics that will be captured and reported as part of reporting:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Software Quality Metrics** | **Purpose** | **Report** | **Target** | **Test Phase** | **Owner** |
| Test Execution Status | This metrics shows the % of Test Case execution across each Test Execution week and cycle. | Daily Test Report  Test Completion Report | •    Test Execution 100%  •    Pass > 100%  •    Failed < 0%  •    Not Completed 0%  •    No Run = 0% | ST | QA & Test Team |
| E2E |
| Defect Categorization | This metrics shows the breakup of defects based on their severity. | Daily Test Report  Test Completion Report | •    Critical = 0  •    Major = 0  •    Minor < 15 | E2E | QA & Test Team |
| Defects Resolution Team | The metrics shows the number of Defects raised per team responsible to resolve the defect | Daily Test Report | •   Less than XX defects per team | ST | QA & Test Team |
| E2E |
| Test Coverage | This metrics is useful to measure the number of test case executed against the planned. | Daily Test Report  Test Completion Report | •   100% | ST | QA & Test Team |
| E2E |

Table 11 - Software Quality Metrics

* **11                Defect Management**
* **11.1                 Introduction**

The purpose of the Defect Management process is to manage the quality of the software and testing coverage. The term "defect" refers to any error in the specification, design, or implementation of a product or service that results in a deviation from the required output.

* **11.2                 Defect Severity**

Defect severity will be classified as follows:

|  |  |  |
| --- | --- | --- |
| **Priority** | **Name** | **Description** |
| 1 | Critical | A Critical issue is so severe that the testing of a complete system or a specific  feature cannot be completed successfully.  No workaround can be applied to continue the test |
| 2 | Major | Major defects are those which could affect the function, performance or appearance of  a product. However, testing of the associated feature can continue with  an acceptable workaround. |
| 3 | Minor | A Minor defect is usually small & insignificant that does not affect the function or  form of the item. Minor functionalities are not working however, testing can be continued  on part of the system while those minor issues are fixed |

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