**6.2 Plan de Pruebas**

**Versión 0.1**

**Fecha:** 25/03/2019

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En esta parte se llevará a cabo la planificación de las pruebas que se le realizarán al software, así como la gestión de dichas pruebas. Entonces resumiendo se puede decir que esta sección describe cada decisión que el equipo de trabajo tome durante la planificación inicial del proyecto así como en su desarrollo.

**Información específica**

En esta sección se identifica el documento, a su vez describe sus orígenes e historial.

**Organización emisora**

En este caso cada iteración es llevada a cabo por un equipo de trabajo que consta de 4 desarrolladores, a continuación se indica el nombre completo de cada desarrollador:

* Steven Paniagua Aguilar
* Ana Rojas Rodriguez
* Silvia Calderón Navarro
* Jose Andres Ceciliano

**Autoridad de aprobación**

La personas encargadas de revisar y firmar este documento son los mismos 4 desarrolladores que se mencionan en el punto anterior:

* Steven Paniagua Aguilar
* Ana Rojas Rodríguez
* Silvia Calderón Navarro
* José Andrés Ceciliano

**Historial de cambios**

|  |  |  |  |
| --- | --- | --- | --- |
| **Fecha** | **Versión** | **Cambio** | **Persona** |
| 25/03/2019 | 0.1 | Emisión inicial del documento | Steven Paniagua Aguilar |

**Introducción**

**Alcance**

El propósito de este documento es proporcionar la información y el marco requerido para planificar y realizar todos los procesos de prueba necesarios para la prueba del producto de software que consiste en una red social llamada Face-TEC

**Referencias**

* Plan de Proyecto
* Especificación de requisitos del proyecto
* Especificación de hardware y software
* Diseño del producto

**Glossary**

Provides a lexicon for the terms, abbreviations, and acronyms, if any, used in the document.

NOTE This section could be an annex, or it could refer to another document providing a general glossary. All or part of the glossary and/or acronym list could be online, as a separate testing specific glossary or incorporated in a larger organizational glossary (including more terms than just those that are testing related).

**Context of the testing**

**Project(s) / test sub-process(es)**

Identifies the project(s) or the test sub-process(es) for which the plan is being written and other relevant contextual information.

**Test item(s)**

Identifies the test item(s) for the testing covered by this plan including their version/revision or reference where this information can be found.

This section may describe the mission/business purpose of the test item(s), or reference where this information can be found.

NOTE This information could be defined in a system definition document, such as a concepts of operations.

EXAMPLE The test item could be a software unit, interfaces between units, a subsystem, or a complete system.

It may also identify any procedures for the transfer of the test item(s) from other environments to the test environment.

**Test scope**

Summarizes the features of the test item(s) to be tested. Also identifies any features of the test item(s) that are to be specifically excluded from testing and the rationale for their exclusion.

EXAMPLE Features to be tested could be specific attributes of the software, functions, interfaces, or business processes.

**Assumptions and constraints**

Describes any assumptions and constraints for the test effort covered by this plan. These may include regulatory standards, the requirements in the Test Policy and the Organizational Test Strategy, contractual requirements, project time and cost constraints, and availability of appropriately-skilled staff, tools and/or environments.

**Stakeholders**

Lists the stakeholders and their relevance to the testing. Describes how the communication with each stakeholder is to be performed.

**Testing communication**

Describes the lines of communication between testing, other lifecycle activities, and within the organization.

EXAMPLE This could include the authority for resolving issues raised as a result of the testing activities and the authority for approving test products and processes.

This information may be represented visually.

NOTE : A visual representation could include an organization chart or a figure that illustrates the flow of information and data.

**Risk register**

Identifies the risks considered by the testing covered by this plan. This should include any relevant risks that may be specified in the Organizational Test Strategy. Provides an exposure level for each risk based on its impact and probability. Provides recommendations to treat the risks. This section may reference where a separate risk register can be found.

EXAMPLE Recommendations to treat risk could include eliminate, reduce, or ignore risk.

NOTE A risk register could be located in a project plan or a risk management plan.

**Product risks**

Identifies test-related product risks and provides recommendations to treat each risk.

EXAMPLE Test-related product risks could include defects in functionality or in non-functional aspects such as performance.

**Project risks**

Identifies test-related project risks and provides recommendations to treat each risk.

EXAMPLE Test-related project risks could include risks related to schedule or resources.

**Test strategy**

Describes the approach to testing for the specified test project or test sub-process, as outlined in the following sub-clauses. The document may refer to the Organization Test Strategy stating only its differences from it.

**Test sub-processes**

For a project test plan this identifies the sub-processes of testing that will be conducted.

**Test deliverables**

Identifies all documents that are to be delivered from the testing activity or equivalent information to be recorded electronically, for example in databases or dedicated test tools.

EXAMPLE The following documents could be included:

* Test Plan;
* Test Design Specification;
* Test Case Specification;
* Test Procedure Specification;
* Test Data Readiness Report;
* Test Environment Readiness Report;
* Incident Reports;
* Test Status Reports; and
* Test Completion Report.

Test input data and test output data may be identified as deliverables. Test tools created as part of the testing activity may also be included. If documents have been combined or eliminated, then this list will be modified accordingly.

This subsection may include when the document(s) should be delivered, and to/from whom (preferably by position, not name).

**Test design techniques**

Specifies which test design techniques are to be applied.

**Test completion criteria**

Describes the conditions under which the relevant test organization considers test execution activities to be complete.

EXAMPLE This could be when a specific coverage has been reached and the number of outstanding defects is under a specified limit.

**Metrics to be collected**

Describes the metrics for which values are to be collected during the test activities.

**Test data requirements**

Specifies all relevant test data requirements for the project or test sub-process (as appropriate).

EXAMPLE This could identify the origin of the test data and state where specific test data is located, whether data has to be disguised for confidentiality reasons, and/or the role responsible for the test data.

These test data requirements may be deferred to the Test Data Requirements document (see 7.5), as applicable.

**Test environment requirements**

Specifies the necessary and desired properties of the test environment.

EXAMPLE This could include hardware, software, testing tools, databases, and personnel (identifying their organizations, as appropriate).

Includes information regarding selection, evaluation, acquisition and support for each tool. It may include test environment requirements for test preparation, test execution (including data capture), and any post-execution activities.

EXAMPLE A post-execution activity could be data analysis.

These test environment requirements may be deferred to the Test Environment Requirements document (see 7.6), as applicable, but reference to this separate document should be stated in the Test Plan.

**Retesting and regression testing**

Specifies the conditions under which retesting and regression testing will be performed. This could include a description of the estimated number of test cycles.

**Suspension and resumption criteria**

Specifies the criteria used to suspend and resume all or a portion of the testing activities in the Test Plan. Identifies who is responsible for suspending and resuming testing activities. Specifies the testing activities that may have to be repeated when testing is resumed.

###### **Deviations from the Organizational Test Strategy**

###### Records any Test Plan content that deviates from the Organizational Test Strategy. Identifies the authorities responsible for approving deviations, where applicable.

###### **Testing activities and estimates**

Identifies all necessary testing activities based on the test process to be used. The activity iteration strategy for the re-execution of test activities should be considered as well as any dependencies.

NOTE The testing activities could be described in terms of a work breakdown structure or activities on an activity board in agile projects.

EXAMPLE Activities that could be considered include those concerning retesting and regression testing.

Describes estimates for each of the identified testing activities to be performed as part of the testing activities covered by the test plan. Additionally, where appropriate, describes the allocated testing budget and cost estimates or references where that information can be found.

NOTE Budget and cost estimates could be located in the project plan.

###### **Staffing**

Describes the staffing requirements for the testing covered by this plan.

###### **Roles, activities, and responsibilities**

Provides an overview of the primary (they are the activity leader) and secondary (they are not the leader, but providing support) people filling the test-related roles and their corresponding responsibilities and authority for the testing activities. In addition, identifies those responsible for providing the test item(s). They may be participating either full- or part-time.

EXAMPLE The responsible parties could include the project manager, the test manager, the developers, the test analysts and executors, operations staff, user representatives, technical support staff, data administration staff, and quality support staff.

For each testing person, specify the period(s) when the person is required.

###### **Hiring needs**

Identifies specific requirements for additional testing staff that are necessary for the test project or test sub- process. Specifies when the staff are needed, if they should be temporary, full or part time, and the desired skill set. These may be defined by contract and business needs.

NOTE Staffing could be accomplished by internal transfer, external hiring, consultants, subcontractors, business partners, and/or outsourced resources.

###### **Training needs**

Specifies test training needs by skill level and identifies training options for providing the necessary skills for the staff needed.

EXAMPLE Training can take a variety of forms, including options such as traditional classroom training, self-paced computer-based training, training over the Internet, visiting the future user site, and mentoring by more knowledgeable staff members.

###### **Schedule**

Identifies test milestones defined in the project schedule and from the test strategy. Summarizes the overall schedule of the testing activities, identifying where activity results feed back to the development,

organizational, and supporting processes. Specifies the schedule for each testing activity and test milestones based on the activity estimates, available resources, and other constraints.

EXAMPLE Supporting processes could be quality assurance and configuration management.

##### **6.3 Test Status Report**

###### **Overview**

The Test Status Report provides information about the status of the testing that is performed in a specific reporting period.

NOTE In an agile project, the Test Status Report might not be a written document. For example, its contents could be discussed at iteration meetings and supplemented by information stored on activity boards and burn-down charts.

Annex [A.2.5](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.39e70oj) provides an outline of the Test Status Report, while Annexes [G.1](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.386mjxu) and [G.2](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.1nbwu5n) provide examples that demonstrate how Test Status Reports could be developed for two different example projects.

The contents of the Test Status Report include:

###### **Document specific information**

**Overview**

This information identifies the document and describes its origins and history.

NOTE The information could be placed on an early page in a document, or in a central place if the contents are kept in electronic form, e.g. in a database.

###### **Unique identification of document**

Uniquely identifies a version of the document.

EXAMPLE The unique identifier could include the title of the document, the date of issue, version, and/or document status (e.g. draft, reviewed, corrected, final).

###### **Issuing organization**

Specifies the organization responsible for preparing and releasing the document. It may also include the author(s).

###### **Approval authority**

Identifies the designated person(s) who have the responsibility for reviewing and signing off on the document (possibly electronically). It may also include the reviewers and pertinent managers.

###### **Change history**

Includes a log of all of the changes that have occurred to the document since its inception.

EXAMPLE 1 This could include a list including the present version of the document and any predecessor documents containing the unique identification of each document, description of document changes with respect to the previous document in the list, reason for changes, and the name and role of the person making the changes.

EXAMPLE 2 Reasons for changes could include audit comments, team review, and system changes, and person making the change could be document author, project manager, system owner.

###### **Introduction**

Provides explanatory information about the context and structure of the document.

###### **Scope**

Identifies the extent of the coverage of the subject area by the document, and describes any inclusions, exclusions, assumptions and/or limitations.

###### **References**

Lists referenced documents and identifies repositories for system, software, and test information. The references may be separated into “external” references that are imposed from outside the organization and “internal” references that are imposed from within the organization.

###### **Glossary**

Provides a lexicon for the terms, abbreviations, and acronyms, if any, used in the document.

NOTE This section could be an annex, or it could refer to another document providing a general glossary. All or part of the glossary and/or acronym list could be online, as a separate testing specific glossary or incorporated in a larger organizational glossary (including more terms than just those that are testing related).

###### **Test status**

Provides information on the status of the testing for the reporting period.

###### **Reporting period**

Specifies the time period covered by the report.

###### **Progress against Test Plan**

Describes the progress that has been made against the Test Plan. Any notable deviations from the plan should be highlighted, with explanations of the reasons for deviation, description of any remedial actions, an account of the effects, and consideration of the implications with regard to planned project objectives.

###### **Factors blocking progress**

Identifies those factors that impeded progress during the reporting period and the corresponding solutions that were implemented to remove them. Outstanding (unsolved) issues still impeding progress should be recorded and possible solutions identified.

###### **Test measures**

Presents the collated test measures related to the end of the reporting period.

EXAMPLE This could include measures on test cases, defects, incidents, test coverage, activity progress and resource consumption.

###### **New and changed risks**

Lists the new risks that have been identified as a result of monitoring and controlling testing as well as changes to existing risks during the reporting period.

###### **Planned testing**

Describes the planned testing for the next reporting period.

**7.11 Test Execution Log**

###### **Overview**

Records details of the execution of one or more test procedures.

The test procedures may be described in lists or in tables in a document or produced by a tool, e.g. a database or a dedicated test tool.

Annex [A.2.14](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.3eiqvq0) provides an outline of the Test Execution Log, while Annexes [R.1](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.va0lgw) and [R.2](https://docs.google.com/document/d/1i3qMzr6lyLFUFIPaBsX0IZY6SLLeXeYGwng2-l08yhY/edit#heading=h.1ueyeci) provide examples that demonstrate how the Test Execution Log could be developed for two different example projects.

The contents of the Test Execution Log include:

###### **Document specific information**

**Overview**

This information identifies the document and describes its origins and history.

EXAMPLE The information could be placed on an early page in a document, or in a central place if the contents are kept in electronic form, e.g. in a database.

###### **Unique identification of document**

Uniquely identifies a version of the document.

EXAMPLE The unique identifier could include the title of the document, the date of issue, version, and/or document status (e.g. draft, reviewed, corrected, final).

###### **Issuing organization**

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###### **Approval authority**

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###### **Change history**

Includes a log of all of the changes that have occurred to the document since its inception.

EXAMPLE 1 This could include a list including the present version of the document and any predecessor documents containing the unique identification of each document, description of document changes with respect to the previous document in the list, reason for changes, and the name and role of the person making the changes.

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###### **Introduction**

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###### **Events**

**Overview**

Lists the significant events encountered during the execution of one or more test procedures.

EXAMPLE The first event could be the start of the test execution session, and the last event could be the final closing of the test execution session.

Further examples of events to record include:

* A sudden drop in performance of the computer on which the test is being executed;
* A failure making further execution of the test impossible;
* A disruption to the test environment causing the actual results to be unreliable.

The information for each event recorded in the Test Execution Log includes:

###### **Unique identifier**

Defines the sequential number of the entry in the Test Execution Log.

###### **Time**

Defines the precise time, including date if necessary, when the event was encountered.

###### **Description**

Describes what happened. This may include a reference to the test procedure and test case being executed when the event was encountered, if relevant.

###### **Impact**

Describes the impact on test execution and/or the actual result, if relevant.