Deliverable D01: Testing a WIS report

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Group E8.02

GithubRepository: https://github.com/acme-recipes/Acme-Recipes

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Executive Summary

This document contains a brief explanation of our knowledge on the testing area in the context of a Web-Information-System after taking some subjects from the degree of Software Engineering at the University of Seville.

Revision table

Revision number	Date	Description
v1	04/07/2022	Initial version
v1.1	04/07/2022	Design fixes and info. added
v2.0	05/07/2022	Final version of the document

Introduction

We have already been taught in different subjects of the degree (including this one during the 2021-2022 school year) the importance of testing a Web Information System, not just because of ensuring the functionalities of the code we implement, but for keeping it simple and well written, eliminating imperfections and guaranteeing quality.

In this document, we will describe all we know about testing a WIS, the different types of tests that we have learnt about, their different utilities and functions, and their different purposes and utilities

Contents

Testing a Web Information System is the act of making sure the system and all its functionalities works as expected, searching for bugs, etc. In general, we could say they check different attributes of our WIS such as functionality, performance, or security.

We have learnt that there are 5 different types of tests for this kind of system:

-**Unit tests**: Code that tests smalls parts of code, called "units". This kind of test has a low level of depth compared to the other kind of tests. The most important quality of this kind of test is the fact that they result to be very fast.

-**Integration tests:** This kind of test is performed after unit tests, proving that all units already tested work correctly in a context of union of all of them.

-**End-to-end tests:** This kind of testing is used for simulating real situations of the system, testing functionality and performance of the application.

-**Acceptance tests:** This type of testing is used just for verifying that the system fulfills all requirements that were detailed in the requisites catalog.

-**Exploratory tests:** This last type of testing tries to discover defects that can't be found and tested in the other types of tests.

Although these are the different types of testing we have studied so far, there exist many different ways of testing any Web Information System. And every system will need a concrete way to prove that it performs correctly, and needs a complex exploration to decide which testing plan will fit the system.

Conclusions

Although we have some previous knowledge about testing a Web Information System, part of it coming from this very subject, we are still learning day by day new contents in this field. Despite our previous experience we know about the difficulty and depth that testing WIS properly represents, so we hope to become real experts in the field of testing and have broader knowledge about it.

Bibliography

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