WIS Architecture Report

Workgroup number: E8.01

Repository: https://github.com/andrsdt/Acme-One

Date: 22/02/2022

Name	Corporate e-mail	
Carrasco Núñez, Alejandro	alecarnun@alum.us.es	
Durán Terrero, Andrés	anddurter@alum.us.es	
López Benítez, Pablo Delfín	pablopben@alum.us.es	
Núñez Moreno, Pablo <u>pabnunmor@alum.us</u>		
Robledo Campa, Pablo José	pabrobcam@alum.us.es	
Vázquez Monge, Francisco Javier	fravazmon@alum.us.es	

Table of Contents

3
4
5
6
7
8

Executive summary

This document is an explanation of the knowledge that the group has about the architecture of a Web Information System. We have gained this knowledge during our years of study in this degree of Software Engineering.

Revision table

(Include revision number, date, and short description on each entry)

Revision number	Date	Description
v1	22/02/22	Initial version
v2	25/02/22	First draft
v3	27/02/22	Final version

Introduction

During our study of Software Engineering, we have gained knowledge related to Web Information Systems. We now have learned the basics of this type of system, including also how to develop and build a system of this characteristics and how the architecture of a real WIS works.

Contents

A Web Information System, also referred to as WIS, is an application that manages data and information and performs different operations with this data. This application is accessed from a Web Explorer and users can deal with it using a user interface.

Traditionally, a WIS is divided into three different layers, each one of them realizing a different task. Usually, these three layers are the next ones:

- -Presentation layer: this layer stores all the information of the different views of the system. The users of the WIS interact with this layer to perform all the actions.
- **-Logic layer:** this layer contains all the logic of the application, this being the operations that the system has to perform.
- **-Resources layer:** this is the layer that stores and interact with the data of the system. It provides the necessary data to the logic layer in order to perform all the needed operations.

The WIS are also traditionally using a Model-View-Controller pattern. In the case of a three-layer architecture, the presentation layer contains the view, and in the logic layer we find the model and the controller.

Even though this is probably the most standard architecture of a WIS, it is definitely not the only one. There are other architectures, such as the architecture based on micro services. In this architecture, the system is divided into different services, each one of them performing a different task. These services are then loosely connected to each other to conform the whole WIS.

As well as we find a wide range of options in the architecture of a WIS, there is also a big number of different patterns developers use in certain cases.

Conclusions

Even though we have already learned what we think are the basics of a WIS, we are still far away from becoming experts in this field of knowledge. We value in great regard our actual knowledge, but we hope that in this subject of *Design and Testing II* we become more comfortable on developing Web Information Systems and we advanced towards our final goal of learning not only the basics, but to get a broader landscape on what a Web Information System works, how their architecture can work and, in the end, to be able to develop the best WIS possible.

Bibliography

Intentionally blank.