

TEAM 5

## Software Project Management Plan

### Smart Mirror

04/01/

#### Team Members

Diego Salzani

Leonardo Corrizato

Nabil Chafiki

Version: 1.

#### Document Control

##### Change History

Revision	Change Date	Description of changes
V1.0	04/01/2020	Initial release^

Version: 1.

## 1 Overview

### 1.1 Purpose and Scope

This project was born under the necessity to create an IOT object that could be implemented in every house and could give useful information to the owner.

### 1.2 Goals and Objectives

The main goal was to deliver a finished version of the product before the ending of 2019, otherwise due to complications we had to postpone the release to January 2020.

Main Objectives of the project were to be able to give to the customer updated information on weather, school schedule and time zones.

### 1.3 Project Deliverables

The finished product will include:

- A smart mirror including an LCD panel
- A micro-computer connected to the server and the LCD that gives the informations
- A wood frame to hold the mirror

- And a user manual

#### *1.4 Assumptions and Constraints*

Assumptions:

- The location API works on the test hardware
- An internet connection is needed
- Power supply is needed
- Constraint: The software only works on linux
- For any software modification you will need to enter the OS

#### *1.5 Schedule and Budget Summary*

The project didn't have a precise budget thanks to the economical support of the school. Main costs were the mirror, the Raspberry PI, the frame and the LCD.

#### *1.6 Success Criteria*

Success will be achieved when the mirror will be able to update itself from IP location and the final product will be ready for delivery until the end of January.

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#### *1.7 Team Organization*

Project Manager:

The project manager was the supervisor and main programmer of the code, he checked that everything was going in the right way and decided whether or not to change the path to follow

Other team members: The other team member worked following the project manager guideline and updated the project with new ideas.

#### *1.8 Tools*

? Programming Language – Python ? Version Control – GIT and GITHUB

## **2 Work Plan**

#### *2.1 Activities and Tasks*

? Programming Weather widget and school schedule ? Diego Salzani ? Difficulty: Hard

? Programming News widget and clock widget ? Leonardo Corrizato ? Difficulty: Medium

? Programming Canvas structure and widget graphical positions ? Nabil Chafiki ? Difficulty: Medium

## *2.2 Release Plan*

We are planning to present the final version of the project in front of our key partners.

The final product will be delivered before the end of January.

## **3 Control Plan**

### *3.1 Monitoring and Control*

24/10/2019 - Project organization 31/10/2019 - Availability of material 07/11/2019 - Realization and first version of the canvas 14/11/2019 - Date and clock widget implementation (first version) 21/11/2019 - Implementation of widgets for school scheduler

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28/11/2019 - Finalization of canvas and widget for time and date 05/12/2019 - Insertion of the news widget 12/12/2019 - Finalization of some points for widgets and revision of the project

## **4 Supporting Process Plans**

### *4.1 Risk Management Plan*

A risk that the team has to face is the lack of experience in developing graphic libraries that can interface with the user and the lack of very limited time for the work required. This lack of experience generates many unknowns.

### *4.2 Configuration Management Plan*

1. All work products will be stored in a repository running on Github
2. Only the system requirements, project plan and source code will be under configuration control.
3. Items that are subject to change control will be considered after a group review after they are created.
4. The change control procedure once a product is baselined is: anyone wanting to make a change to a baselined item sends an email to the rest of the group describing the change, reason for the change, expected impact, and timeline for integrating the change. If no one responds to the group within 3 days with a reason for why the change request shouldn't be permitted, it will be considered accepted and the person proposing the change may proceed with the change. If anyone does object to the change, the reason for objecting will be discussed at a meeting where everyone is invited to attend and voice their opinion. At the end of the meeting a democratic vote will be held to decide whether or not the change should be allowed.
5. Including a change history with all documents is obligatory in all the documents. The change history should be at the front of the work item and include: the name of the person making the change, brief description of what has changed, reason for the change, and the date the change was integrated.

#### *4.3 Product Acceptance Plan*

The project will be considered a success if the team delivers an operational prototype necessary for the functions for which it was created and which reflects the objectives documented by us, and two or more of the team members would be willing to work together on another software project in the future for developing a new features.