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Study and development with the Android platform

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Abstract

Acknowledgment

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1 Introduction

Mobile phone market currently knows a huge revolution with the emergence of smartphones. This revolution was launched by Apple with its IPhone. Lots of people have been seduced by this one. Google realized the potiential of this market and chose to get inside. Therefore it decided to create its own Operating System (OS) for smartphones which could competed with IPhone OS[1] as known as IOS. Its name is Android.

Since Android was created, it knows a very large growth. Indeed, this OS is became the leader in sales of smartphones in the world in just two years after its placing on the market. Due to its free access, lots of manufacturers have adopted it very quickly. Android has a large developer community that contributes to the creation of diverse and varied applications available on Android Market, the online software store developed by Google for Android devices.

The objectives of this project were to begin with study the Android platform, which it is, what it offers to users and developers. And in a second place, the creation of an application using the possibilities of the platform.

A first part will permit to present in details what Android is, the tools used to develop an application and the subject of this project which will present the chosen application. Finally, a second part will describe the implemented application.

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[1]IPhone Operating System

2 Context

2.1 What is Android ?

2.2 Presentation of the subject

With the Android platform, the developer can have many possibilities in the creation of applications. Therefore there are so many applications available on the Android Market.

The final purpose of the project is to use more functionnalities as possible in an application to get a view of what is feasible. To save development time, the software (a task manager), realized in the first semester as part of the unit value *Modélisation, Interface utilisateur, Conception Avancée (MICA)*, was chosen.

So that, the project consists to :

- adapt the existing application to an Android smartphone;

- add correctly several useful functionnalities to the smartphone;

- have a functionnal application.

2.3   The task manager

2.3.1   Presentation of existing

The task manager realized as part of the unit part MICA[1] is a sofware for managing daily tasks that everyone should make. It is a memory aid used by everyone.

Existing functionnalities

This software can realize the following actions :

- manage tags;

- manage tasks;

- sort tasks according to specific criteria;

- assign sub-tasks to tasks;

- change language via a software internationalization in English;

- save the tasks list.

View of the existing

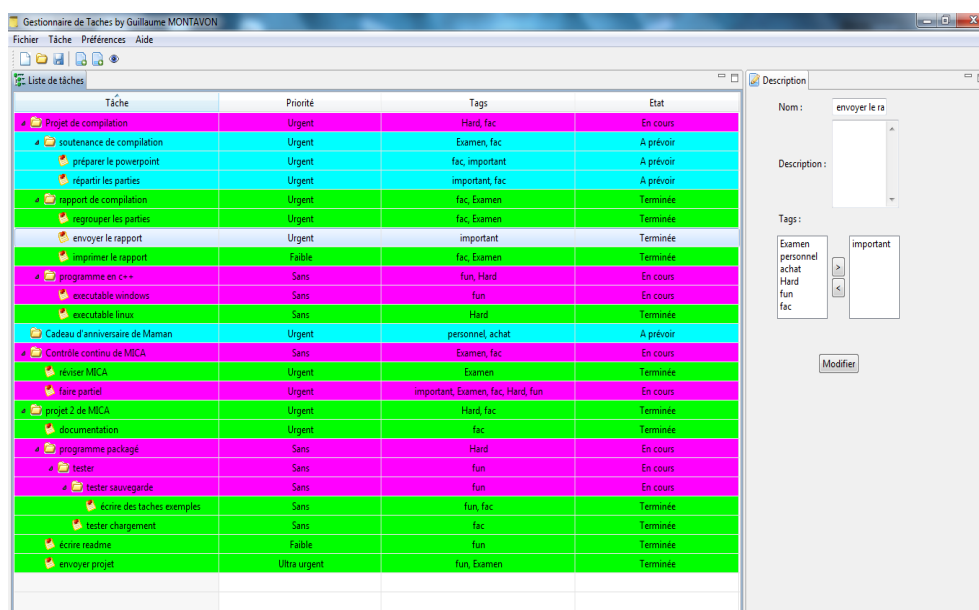[1]Modélisation, Interface utilisateur, Conception Avancée

Figure 2.1: Example of screenshot of the existing task manager

2.3.2 Presentation of the software for smartphones

The sofware must be able to adapt to a smartphone while containing the functionnalities listed above. That is to say, he must be able to adapt to screen size, have a simple interface and not over-elaborate, but still full. It must also include new possibilities available with Android.

2.4 Specifications

2.4.1 Application design

2.4.2 Technical constraints

2.4.3 Temporal constraints

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