Chapter 6
Application Mobile Design for Blind People:
History Memorama

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ABSTRACT

The team software process is a methodology focused on software development on gears, which at the end of the construction ensures product quality. This quality must be taken into account for people with disabilities like visual impairment. According to World Health Organization, in a study conducted in 2010, the number of people with visual impairment in the world is around 285,389 million people, and in America, it is around 26,612 million. This chapter focuses on using the TSP for the construction of an application for people with visual disabilities, resulting in a quality product that will help in memory and, in addition, the user learns about the city of Aguascalientes, Mexico, allowing the inclusion of these users in society.

INTRODUCTION

Inclusion is a way to integrate a person into society so that he/she can participate, contribute and benefit during this process. The main objective of inclusion is that individuals, especially those who are in conditions of marginalization or segregation develop in the social field (Significados.com, 2017). As it is the case for people with disabilities.

The term disability, according to the International Classification of Functioning, Disability and Health, "are those who have one or more physical, mental, intellectual or sensory impairments and when interacting with different settings of the social environment may hinder their full and effective participation on equal terms to others" (Instituto Nacional de Estadística y Geografía, 2010). Conditions that should apply also in the use of technology.

Nowadays technologies, with the advantages they offer, good use should be given to them, but not necessary is given or taken advantage in the right way. The good use of technologies may help in various areas, for example, education, which allows teaching in an innovative way, to help improve the education of their students according to their specific needs. Therefore, it was chosen to design a game for people with visual disabilities that have completely lost their vision.

There are applications that are already designed for blind people, but most of them are readers of documents and even money, there are also games, but they have not been found many on mobile devices for the entertainment of people with visual disabilities and this teach history, develop memory skills and other, because for this disability is relevant the development of this skills (Sánchez, Flores, & Aravena, 2003).

The visual disability can be limited to people in performing everyday tasks and affecting their quality of life, as well as the potential for interaction with the world. Within the visual disability, according to the World Health Organization, there are different grades, such as blindness, moderate or severe vision loss, and low vision.

Blindness, the most severe form of visual disability, may reduce the ability of people to perform everyday tasks and walking without help. The rehabilitation of good quality allows people with various degrees of visual disabilities to enjoy life, achieve their goals and participate actively and productively in today's society.

There is a real need to have systems for people with visual disabilities to improve the mobility skills and orientation (TISE, 2009), it was therefore designed a game that even allows the user to have a form of distraction in order to speed up the ability to withhold information. This will allow the user to have a greater ease of memorization in their daily life, to put it into practice and have fun when doing it, allowing him to have a greater identification of his environment. In the updating of the ISO 9000:2000, the definition was as "*the degree to which a set of inherent characteristics meets the requirements*"

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