Universidad de Guadalajara

Centro Universitario de los Valles



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| **Materia:** | Administración de la Configuración del Software |
| **Maestro:** | Omar Ali Zatarain Durán |

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| **Autor:** | Liusmila Nieto Cervantes |

**1. Definition of Baseline**

A baseline provides a logical basis for comparison. A specific version of a single work product by itself, or a set of work products together can be established as a baseline. During the course of product development, a series of baselines is established, enabling assessment of the evolving product’s maturity at different points in time.

The baseline is established for the development project "Information Management System for the Laboratory of Psychological Attention and Intervention at the University Center of the Valles".

The development of the management system is done using the Extreme Programming (XP) methodology. The configuration elements that form the baseline are defined in accordance with the artifacts proposed by this methodology.

* **Software Requirements Specification** (Functional Requirements, Non-Functional Requirements and User Stories).

The software to be developed is described based on an understanding of the business context and analysis of the main characteristics.

* **System Design** (Prototypes and Entity-Relationship Diagram).
  + Prototypes are created for a better understanding of user stories.
  + The architectural aspects of the system are described according to the framework to be used.
  + Entity-Relationship Diagram is performed to design and understand the architecture of the database.
* **Source Code**.

Source code obtained as a result of the implementation process.

* **Database**.

Organized structure for storing information.

* **Acceptance Testing Design**.

It includes the test cases and acceptance criteria that will be used to validate whether the system meets the requirements and expectations of the customer.

**2. Software Requirements Specification**

**2.1 System features**

To contribute to the management and control of the information generated in the LEIP, a computer system will be developed for its information management. This system will allow standardized management of the information, contributing to its integrity, availability, and redundancy.

The modules defined for the system are:

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| **Module** | **Description** |
| Security | It will include functions for user management and user permission. |
| Management of Nomenclatures | It includes options to define standardized information in the system (nomenclatures). |
| Psychological Assessment and Follow-up | It will conduct psychological assessments and will allow for the recording of the follow-up on the provided psychological attention. |
| Reports | It provides information about the number of patients attended and evaluated based on their academic degree and the type of care received, allowing tracking of the laboratory's activity. |

**2.2 Functional Requirements**

**Module Security:**

RF1: List users.

RF2: Add user.

RF3: View data from user.

RF4: Update user data.

RF5: Delete user.

RF6: Assign role to user.

RF7: Authenticate user.

RF8: Modify user password.

**Module Management of Nomenclatures:**

RF1: List Bachelor's Degree.

RF2: Add Bachelor's Degree.

RF3: View data from Bachelor's Degree.

RF4: Update Bachelor's Degree.

RF5: Delete Bachelor's Degree.

RF6: List Degree.

RF7: Add Degree.

RF8: View data from Degree.

RF9: Update Degree.

RF10: Delete Degree.

RF11: List Family Income.

RF12: Add Family Income.

RF13: View data from Family Income.

RF14: Update Family Income.

RF15: Delete Family Income.

RF16: List Institutions of Psychological Attention.

RF17: Add Institutions of Psychological Attention.

RF18: View data from Institutions of Psychological Attention.

RF19: Update Institutions of Psychological Attention.

RF20: Delete Institutions of Psychological Attention.

**Module Psychological Assessment and Follow-up:**

RF1: List Psychological Attention.

RF2: Add a Psychological Attention.

RF3: View data from Psychological Attention.

RF4: Update Psychological Attention data.

RF5: Register Psychological Instruments “Measures of Transversal Symptoms (MST)” applied to the patient.

RF6: Generate patient assessment based on the psychological instrument applied.

RF7: View data from Psychological Instruments MST.

RF8: Update Psychological Instruments MST.

RF9: Register Type of Attention indicated to the patient (Refer, Workshops, Consultations).

RF10: Register Patient Attention Status (Follow-up, Discharge, Discontinuation).

**Module Reports:**

RF1: Generate reports with the number of patients attended by Bachelor's Degree.

RF2: Generate reports with the number of patients attended by Specialist.

RF3: Generate reports with the number of patients assessed by Type of Attention.

**2.3 Non-Functional Requirements**

**Security:**

* + A two-factor authentication system must be implemented to access the system.
  + All confidential data must be stored using encryption techniques.

**Graphic Design:**

* + The user interface must follow responsive design guidelines to adapt to different devices and screen sizes.
  + A color palette based on light blues should be used.

**Availability:**

* + An automated backup system must be implemented to perform daily backups.
  + Planned maintenance must be carried out during low-demand hours.

**Portability:**

* + The system must be compatible with web browsers such as Chrome, Firefox, Safari, and Internet Explorer.
  + The system must be compatible with multiple operating systems, such as Windows, MacOS, and Linux.