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| **Menoufia University** |  |  |
| **Faculty of Computers and Information** | **Year: Fourth Year** |
| **Computer Science Department** | **Graduation Project 2022-2023** |

**Graduation Project**

* **Team Members:**

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* **Project Title:**

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| **E-learning platform (Minda)** |

* **Description:**

Minda is an E-learning platform that provides students with important courses that is well-taught by professors, giving professors the ability to add courses, materials and make quizzes.

Preface

**E-learning platform**

**Version 1.6**

**4/12/2022**

This documentation is oriented to customers, manager, developer, designer, and tester

Introduction

This document will contain a detailed information about how the platform will work using authentication and registration pages, the ability for professors to add courses and materials, make announcements, the students will be able to see courses, make achievements and take quizzes.

|  |  |
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| Authentication | Making sign in and sign up pages to give the ability for every user to edit, have profile, and order with his name. |
| HTML | The structure markup language to make the page skeleton. |
| CSS | Used for adding some visuals to website’s pages |
| JavaScript | Programming language used for adding some functionality and interactivity to website’s pages |
| XML | A metalanguage which allow users to define their own markup language |

Glossary

Glossary

|  |  |
| --- | --- |
| SQL Server | Relational database management system to manage the database, produce queries and reports and update upcoming data. |
| GUI | The graphical user interface. |
| CSS | Used for adding some visuals to website’s pages. |
| C# | Programming language used for many purposes such as creating desktop application or GUIs. |
| Java | Programming language used for many purposes such as creating desktop application or GUIs. |
| Kotlin | A modern programming language that is used and more specified in android application development. |
| MVVM | Model-View-View-Model, an architecture design pattern that is recommended by google in android development. |
| Retrofit | A library that allows developers to deal with REST APIs through android development |
| MVC | **Model–view–controller** is a software architectural pattern commonly used for developing [user interfaces](https://en.wikipedia.org/wiki/User_interface) that divide the related program logic into three interconnected elements. |
| ASP.Net Core | A cross platform framework to make web applications using C# |

User Requirement Definition

Functional Requirement:

* Add user by providing name, email, password.
* Log in using email and password.
* Search about Course using the name of Course.
* Home page contains Info and Goal of ‎platform‎.
* Course page contains the most popular Courses.
* Settings page allows users to modify his basic Info.
* Professors can add or delete or update Course in platform.
* By completing particular courses, student will have an achievement badge.
* Student can take a quiz before enrolling to a course to determine whether he really needs to take this course or not.
* Profile page contains personal info, badges earned and contacts.
* A to-do section so that the student can schedule his learning.
* staff can evaluate students after finishing any courses
* staff has the authority to modify the students of the course
* admin have all authorities to manage staff,students and courses

Non-Functional Requirement:

* Safety Requirements
* Software Quality Attributes
* Usability Requirement
* Performance Requirement
* Efficiency Requirement
* Product Requirement.
* Organizational Requirement.

System Architecture

System Requirement Specification

Functional Requirement:

* A user shall be able to register in system by providing name, email, password
* The system shall response to unfilled registration formation.
* The system shall contain a login page using email and password.
* Each staff member using the system shall be uniquely identified by his or her eight-digit employee number.
* Staff shall be able to add or delete book in courses.

Non- Functional Requirement:

* Safety Requirements: - The database may get crashed at any certain time due to virus or operating system failure. Therefore, it is required to take the database backup.
* Software Quality Attributes: - The Quality of the database is maintained in such a way so that it can be very user friendly to all the users of the database.
* System shall be available 24 hours per day
* Only staff shall manage all user accounts.

System Model

System Evolution

Appendix

Hardware

Software

Database

How to use software

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Table of content