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CENG 407

Mobile School Management System

SRS REPORT

Version 1.0

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PREFACE

This document contains the Software Requirements Specification (SRS) of Mobile School Management System (MSMS), which aims at a project that will bring Parents, Students, Teachers and Institution, System Administrator users together in a common system. MSMS SRS is prepared according to IEEE STD 830-1998, IEEE Recommended Practice for Software Requirements Specifications. This document involves all tools, functions, user characteristics and system requirements of the product.

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1.INTRODUCTION

The subsections of this section will provide an overview of the entire Software Requirements Specification (SRS) document. In this section, it contains a document documentation that includes the application stages with MSMS requirements.

1.1 PURPOSE

This document consists of technical explanations required for all software. The document content is prepared according to IEEE standards and includes descriptions of all functions about the Mobile School Management System(MSMS), about requirements, and about users.

1.2 SCOPE

Mobile School Management System (MSMS) The first is a Web - based system, and the second is a mobile application-based system. In the content of this system, there are three main user actors; the student, parent and teacher, as well as school management and school computing management are these users. In this way, it is to collect all school content under one roof and prepare interactive system content.

The aim of the project is;

- All kinds of communication , activities and homework , etc.in a virtual environment between the student, parent and teacher triangle, using situations effectively one-on-one.
- Publish all the content of the school administration and provide information about the school and its activities to other users.
- School computing management is to provide services to users about announcements,events, notifications and system requirements for the effective operation of this system.

1.3 GLOSSARY

Abbreviation	Meaning
MSMS	Mobile School Management System
IEEE	Institute of Electrical and Electronics Engineers
SRS	Software Requirements Specifications

2. OVERALL DESCRIPTION

In this section, the needs and basics of the system are explained in detail. In this section, it consists of three main sections, and each section contains subcategory sections within itself.

2.1 PRODUCT INTERFACES

MSMS is a totally self-contained system. Also it is not dependent on any hardware heavy system.

2.1.1 SYSTEM INTERFACES

MSMS is only connected to the E-School system which provides grades and information about the students that use MSMS.

2.1.2 USER INTERFACE

In the user interface, there are Web and Mobile-Based user types for these, users simply need to use devices that contain simple computer hardware and basic mobile hardware. Since there are three types of main users, they can see their own homework, announcements and notes when entering the system as a student. When logged into the system as a parent, the user can get information about the student, about the school and about the announcements and activities that the teacher has put in the system, etc., and also create an appointment system with the school administration and teacher through the application.

2.1.3 HARDWARE INTERFACES

The requirement on the Web side includes the server/client side requirement for hardware.

Server side

This system is expected to run on 64 bit based devices and on a 30-40 gb hard disk system.

Client side

This system is available to all personal computers, all operating systems such as linux, windows etc.

Mobile side

The requirement hardware for the mobile base is that minimum contains a requirement to run an application. For this purpose, it contains up-to-date software and contains at least 4 GB memory.

2.1.4 SOFTWARE INTERFACE

This system is on the web side ASP.NET because it will be developed with all https requests, it will be able to work over all computers through the TCP protocol, the system can return to the user over the web.

Since this system will also be mobile-based, MSMS is an application that can run on both platforms using flutter software.

2.2 PRODUCT FUNCTIONS

In this section, the contents of the functions that users can do in the system are explained in detail.

2.2.1 Student Functions

The user he/she can see exam results, see the curriculum, see announcements, see news, get notifications, reservations, see and answer surveys, and give feedback.

Student_Login Function

Student_ExamResult Function

Student_Curriculum Function

Student_Announcement Function

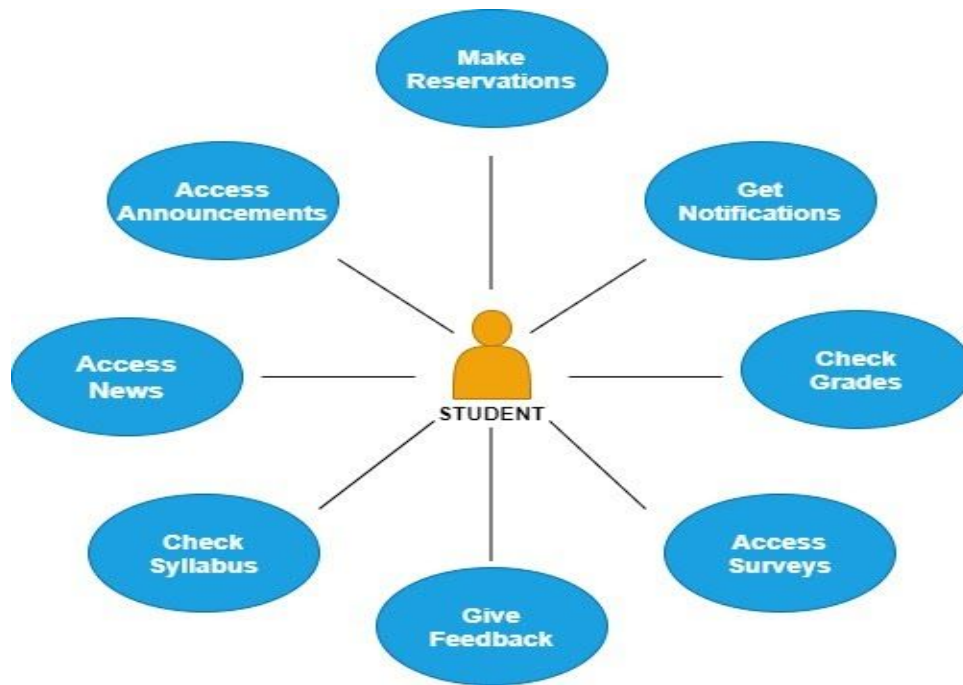
Student_News Function

Student_Notification Function

Student_Reservation Function

Student_Survey Function

Student_Feedback Function



2.2.2 Teacher Functions

After logging the system, the teacher performs certain functions of his / her own thanks to the system. These functions respectively;

Teacher_Login Function

Teacher_Reservation Function

Teacher_Settings Function

Teacher_Feedback Function

Teacher_ Survey Function

Teacher_ Syllabus Function

Teacher_ Announcements Function

Teacher_News Function



2.2.3 Parent Functions

After the parent logging the system, it performs certain functions of its own thanks to the system. These functions respectively;

Parent_Login Function

Parent_StudentData Function

Parent_Feedback Function

Parent_Reservation Function

Parent_Survey Function

Parent_Setting Function

Parent_AccountingOperations Function

Parent_Announcements Function

Parent_News Function



2.2.4 School Management Functions

After logging into the system, the administrative employee performs its own specific functions thanks to the system. These functions respectively;

SchoolManager_Login Function

SchoolManager_Announcements Function

SchoolManager_Notification Function

SchoolManager_News Function

SchoolManager_ViewReservation Function

SchoolManager_ViewSurvey Function

SchoolManager_Settings Function

SchoolManager_Feedback Function



2.2.5 School IT Management Functions

After the School IT Management logging the system, it performs certain functions of its own thanks to the system. These functions respectively;

SchoolITMan_Login Function

SchoolITMan_DataTransfer Function

SchoolITMan_SchoolAdd Function

SchoolITMan_ClassAdd Function

SchoolITMan_SectionAdd Function

SchoolITMan_GrupAdd Function

SchoolITMan_UpdateEducationLogo Function

SchoolITMan_Notification Function

SchoolITMan_Reservation Function

SchoolITMan_AbsenceNotice Function

SchoolITMan_ExamResult Function

SchoolITMan_Syllabus Function

SchoolITMan_AccountingOperations Function

SchoolITMan_Announcements Function

SchoolITMan_Report Function

SchoolITMan_News Function

SchoolITMan_Management Function

SchoolITMan_Settings Function



2.3 USER CHARACTERISTIC

All users must have at least Internet browsing skills to use the system, as well as skills that can be used for smartphones and tablets.

3. SPECIFIC REQUIREMENTS

3.1 External Interfaces

Name of item: The SQL file, which includes user's information

Description of Purpose: This file's purpose is to contain information

Source of Input: Structured Query Language(SQL) File

Valid Range, Accuracy, and/or Tolerance: The accuracy and integrity of the file is provided by SQL. Any incorrect data is not tolerable. In such a case, the school IT management should be able to fix such errors.

Timing: As long as the user's keep using the system.

3.2 Functions

3.2.1 Students Functions

3.2.1.1 Student_LoginFunction

Introduction: Students should be able to login to the system.

Input: student_id, student_pass.

Process: The student logs in to the system. If the student enters wrong login credentials there will be an error message displaying.

Output: error message to the user will be displayed.

3.2.1.2 Student_ExamResult Function

Introduction: Students should be able to get an exam result .

Input: None.

Process: The student can show all exam results.

Output: List of all exam results.

3.2.1.3 Student_Curriculum Function

Introduction: Students should be able to get a curriculum .

Input: None.

Process: The student can show all the curriculum.

Output: List of all curriculum.

3.2.1.4 Student_Announcement Function

Introduction: Students should be able to get an announcement .

Input: None.

Process: The student can show all the announcements.

Output: List of all announcements.

3.2.1.4 Student_News Function

Introduction: Students should be able to get news .

Input: None.

Process: The student can show all the news.

Output: List of all news.

3.2.1.5 Student_Notification Function

Introduction: Students should be able to get notification .

Input: None.

Process: The student can show all the notifications.

Output: List of all notifications.

3.2.1.5 Student_Reservation Function

Introduction: Students should be able to get reservations .

Input: None.

Process: The student can show all the reservations.

Output: List of all reservations.

3.2.1.6 Student_Survey Function

Introduction: Students can participate and do surveys within the system.

Input: None.

Process: The student can show all the surveys.

Output: List of all surveys.

3.2.1.7 Student_Feedback Function

Introduction: Students can receive and give feedback within the system.

Input: None.

Process: The student can show all the feedback.

Output: List of all feedback.

3.2.2 Teacher Functions

3.2.2.1 Teacher_Login Function

Introduction: Teachers should be able to login to the system.

Input: teacher_id, teacher_pass.

Process: The teacher logs in to the system. If the teacher enters wrong login credentials there will be an error message displaying.

Output: error message to the user will be displayed.

3.2.2.2 Teacher_Reservation Function

Introduction: Teachers should be able to get reservations .

Input: None.

Process: The teacher can show all the reservations.

Output: List of all reservations.

3.2.2.3 Teacher_Settings Function

Introduction: Teachers should be able to get settings .

Input: None.

Process: The teacher can show all the setting systems.

Output: List of all setting systems.

3.2.2.4 Teacher_Feedback Function

Introduction: Teachers can receive and give feedback within the system.

Input: None.

Process: The teacher can show all the feedback.

Output: List of all feedback.

3.2.2.5 Teacher_Survey Function

Introduction: Teachers can participate and do surveys within the system.

Input: None.

Process: The teacher can show all the surveys.

Output: List of all surveys.

3.2.2.6 Teacher_Syllabus Function

Introduction: Teachers should be able to get a syllabus .

Input: None.

Process: The teacher can show all the syllabus.

Output: List of all syllabus.

3.2.2.7 Teacher_Announcements Function

Introduction: Teachers should be able to get an announcement .

Input: None.

Process: The teacher can show all the announcements.

Output: List of all announcements.

3.2.2.8 Teacher_News Function

Introduction: Teachers should be able to get news .

Input: None.

Process: The teacher can show all the news.

Output: List of all news.

3.2.3 Parent Functions

3.2.3.1 Parent_Login Function

Introduction: Parents should be able to login to the system.

Input: parent_id, parent_pass.

Process: The parent logs in to the system. If the parent enters wrong login credentials there will be an error message displaying.

Output: error message to the user will be displayed.

3.2.3.2 Parent_StudentData Function

Introduction: Parents can access and view all students' data.

Input: None.

Process: The parents can show all the students' data.

Output: List of all students' data.

3.2.3.3 Parent_Feedback Function

Introduction: Parents can receive and give feedback within the system.

Input: None.

Process: The parent can show all the feedback.

Output: List of all feedback.

3.2.3.4 Parent_Reservation Function

Introduction: Parents should be able to get reservations .

Input: None.

Process: The parent can show all the reservations.

Output: List of all reservations.

3.2.3.5 Parent_Survey Function

Introduction: Parents can participate and do surveys within the system.

Input: None.

Process: The parent can show all the surveys.

Output: List of all surveys.

3.2.3.6 Parent_Setting Function

Introduction: Parents should be able to get settings .

Input: None.

Process: The parents can show all the setting systems.

Output: List of all setting systems.

3.2.3.7 Parent_AccountingOperations Function

Introduction: Parents can realize accounting operations related to educational institutions.

Input: None.

Process: The parent can see all the accounting transactions.

Output: all accounting operations are listed in the system.

3.2.3.8 Parent_Announcements Function

Introduction: Parents should be able to get an announcement .

Input: None.

Process: The parent can show all the announcements.

Output: List of all announcements.

3.2.3.9 Parent_News Function

Introduction: Parents should be able to get news .

Input: None.

Process: The parents can show all the news.

Output: List of all news.

3.2.4 School Management Functions

3.2.4.1 SchoolManager_Login Function

Introduction: School managers should be able to login to the system.

Input: SchoolManager_id, SchoolManager_pass.

Process: The school manager logs in to the system. If the school manager enters wrong login credentials there will be an error message displaying.

Output: error message to the user will be displayed.

3.2.4.2 SchoolManager_Announcements Function

Introduction: School managers should be able to get an announcement .

Input: None.

Process: The school managers can show all the announcements.

Output: List of all announcements.

3.2.4.3 SchoolManager_Notification Function

Introduction: School managers should be able to get notification .

Input: None.

Process: The school manager can show all the notifications.

Output: List of all notifications.

3.2.4.3 SchoolManager_News Function

Introduction: School managers should be able to get news .

Input: None.

Process: The school manager can show all the news.

Output: List of all news.

3.2.4.4 SchoolManager_ViewReservation Function

Introduction: The school managers can see the reservations.

Input: None.

Process: The school manager can show all the reservations.

Output: List of all reservations.

3.2.4.5 SchoolManager_ViewSurvey Function

Introduction: The school managers can see the survey.

Input: None.

Process: The school manager can show all the surveys.

Output: List of all surveys.

3.2.4.6 SchoolManager_Settings Function

Introduction: School managers should be able to get settings .

Input: None.

Process: The school managers can show all the setting systems.

Output: List of all setting systems.

3.2.4.7 SchoolManager_Feedback Function

Introduction: School managers can receive and give feedback within the system.

Input: None.

Process: The school managers can show all the feedback.

Output: List of all feedback.

3.2.5 School IT Management Functions

3.2.5.1 SchoolITMan_Login Function

Introduction: School IT managers should be able to login to the system.

Input: SchoolITManager_id, SchoolITManager_pass.

Process: The school IT manager logs in to the system. If the school IT manager enters wrong login credentials there will be an error message displaying.

Output: error message to the user will be displayed.

3.2.5.2 SchoolITMan_DataTransfer Function

Introduction: school IT manager performs data transfer between student, parent and teacher.

Input: None

Process: school IT manager can observe data transfers that it performs.

Output: school IT manager can list all data transfers it performs.

3.2.5.3 SchoolITMan_SchoolAdd Function

Introduction: school IT manager can add school.

Input: None

Process: school IT manager can see the schools it adds.

Output: school IT manager can list all the schools it adds.

3.2.5.3 SchoolITMan_ClassAdd Function

Introduction: school IT manager can add class.

Input: None

Process: school IT manager can see the class it adds.

Output: school IT manager can list all the classes it adds.

3.2.5.4 SchoolITMan_SectionAdd Function

Introduction: school IT managers can add sections.

Input: None

Process: school IT manager can see the section it adds.

Output: school IT manager can list all the sections it adds.

3.2.5.5 SchoolITMan_GroupAdd Function

Introduction: school IT managers can add groups.

Input: None

Process: school IT manager can see the section of the group.

Output: school IT manager can list all the group it adds.

3.2.5.6 SchoolITMan_UpdateEducationLogo Function

Introduction: school IT managers can update the logo and information of educational institutions.

Input: None

Process: school IT manager can see the information it updates.

Output: school IT manager can list all the information it has updated.

3.2.5.7 SchoolITMan_Notification Function

Introduction: School IT managers should be able to get notification .

Input: None.

Process: The school IT managers can show all the notifications.

Output: List of all notifications.

3.2.5.8 SchoolITMan_Reservation Function

Introduction: school IT managers manage reservations.

Input: None.

Process: The school IT managers can show all the reservations.

Output: List of all reservations.

3.2.5.9 SchoolITMan_AbsenceNotice Function

Introduction: school IT managers manage absence notices.

Input: None.

Process: The school IT managers can show all the absence notices.

Output: List of all absence notices.

3.2.5.10 SchoolITMan_ExamResult Function

Introduction: school IT managers manage exam results.

Input: None.

Process: The school IT managers can show all the exam results.

Output: List of all exam results.

3.2.5.11 SchoolITMan_Syllabus Function

Introduction: school IT manager can perform syllabus operations.

Input: None.

Process: The school IT managers can show all the syllabus.

Output: List of all exam syllabus.

3.2.5.12 SchoolITMan_AccountingOperations Function

Introduction: school IT manager can perform accounting management operations.

Input: None.

Process: The school IT manager can see all the accounting transactions.

Output: all accounting operations are listed in the system.

3.2.5.13 SchoolITMan_Announcements Function

Introduction: school IT manager can perform announcement management operations.

Input: None.

Process: The school IT manager can see all the announcements.

Output: all announcement operations are listed in the system.

3.2.5.14 SchoolITMan_Report Function

Introduction: The school IT manager can do reporting.

Input: None.

Process: The school IT manager can see all the reports.

Output: all reports operations are listed in the system.

3.2.5.15 SchoolITMan_News Function

Introduction: The school IT manager can perform news operations.

Input: None.

Process: The school IT manager can see all the news.

Output: all news operations are listed in the system.

3.2.5.16 SchoolITMan_Management Function

Introduction: The school IT manager can create other types of administrators.

Input: None.

Process: The school IT manager can see all the other types of administrators.

Output: all other types of administrators operations are listed in the system.

3.2.5.17 SchoolITMan_Settings Function

Introduction: School IT managers should be able to get settings .

Input: None.

Process: The school IT managers can show all the setting systems.

Output: List of all setting systems.

3.3 PERFORMANCE REQUIREMENTS

This system is created for unlimited school capacity. There is no cap in the amount of schools or users in this system, but in the first phase there will be 1 school to try out the system. Users should get results within 5-10 seconds in the final form of the system.

3.4 SECURITY REQUIREMENTS

This system is only available to some schools and their inside users. Users information can be viewed only by the users that have authority to do so. Each user has different privileges in the system for security measures.