SMS School Management System

Index

Introduction

Motivation

System Development

Conclusions

Introduction

- A School Management System is a large database system which can be used for managing school's daily work.
- It is configurable and can be configured to meet most individual school's needs.
- It is a multi-user system and can be used by thousands of users at same time.
- General speaking, it is platform running on a Local Area Network (LAN).

Motivation

□ Introduction

Motivation

- □ System Development
- □ Conclusions

Motivation (1)

- Every School is working on a developed strategy which aims the development of scalable structures in all the high schools of their respective countries.
- Most of the high schools are already equipped with necessary hardware and network structures.
- Open issue:
 - Managing the information electronically.
- □ Solution:
 - School Management System

Motivation (2)

- □ Goals:
 - managing information on students,
 - employees,
 - teaching processes
 - etc...

Initiative of a Professional High School .

System Development

□ Introduction

■ Motivation

System Development

□ Conclusions

System Development

System

Development

Analysis and Definition

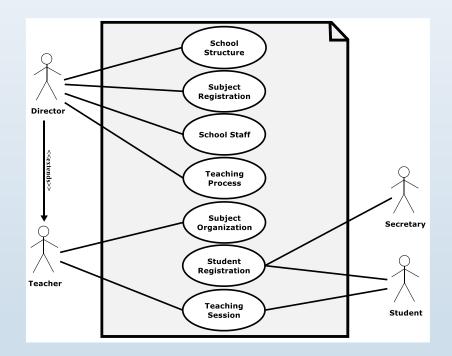
- Design
 - Data Model
 - Software Model

Implementation

Analysis & Definition

The requirements
 specification document
 was created.

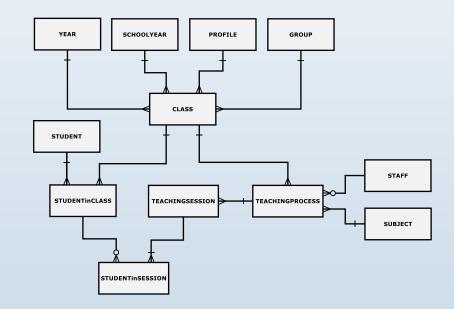
Existing documents were a good reference.



Design (Data Model)

We made decisions regarding how best to take the system in the real world and model it in a database.

 A well-designed database takes time and effort to conceive, build and refine.

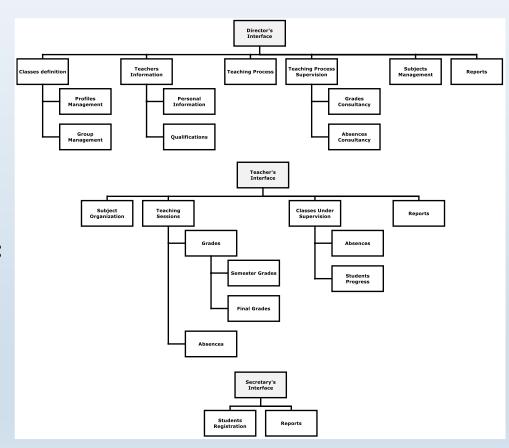


Design (Software Model)

- Object-Oriented Modeling technique.
- Designed in order to define a good ORM.
- The model better describes interactions and relationships between objects representing real life entities.

Implementation

- 3 levels of users with different rights upon the data/information that can be stored, retrieved or modified:
 - Director
 - Teachers
 - Secretary
 - Parents



Conclusions

□ Introduction

■ Motivation

□ System Development

Conclusions

Technologies

- □ Java 8
- □ Spring / Spring Boot
- Spring Securities
- PostgreSQL
- □ Tomcat 8
- Hibernate

Conclusions

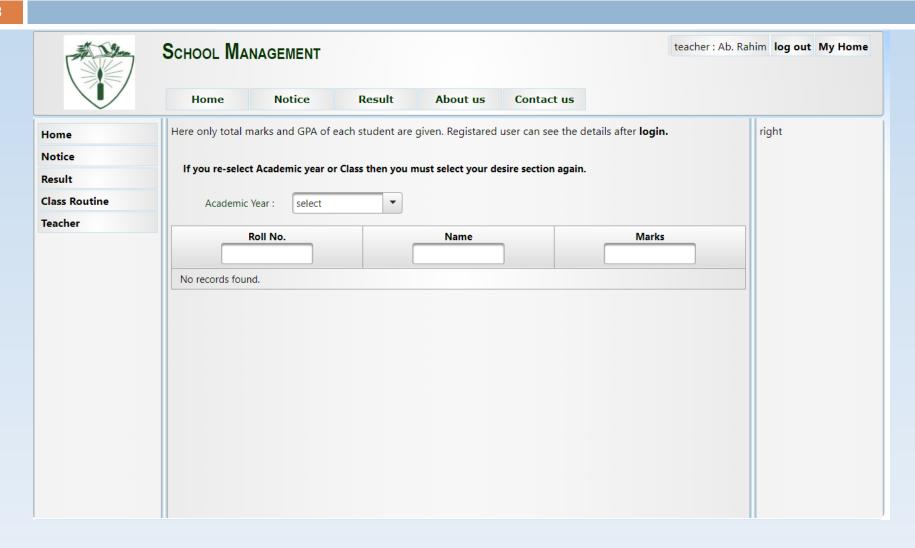
- The need of managing the information electronically is growing rapidly in all important areas.
- School Management Systems are being identified as an appropriate method for managing information in schools.
- SMS was built based on real life situations in high school, taking into consideration all possible situations and functionalities of the daily work in these schools.
- This system maybe considered as a good first step in implementing performing electronic based information management in schools.

Screen Shots

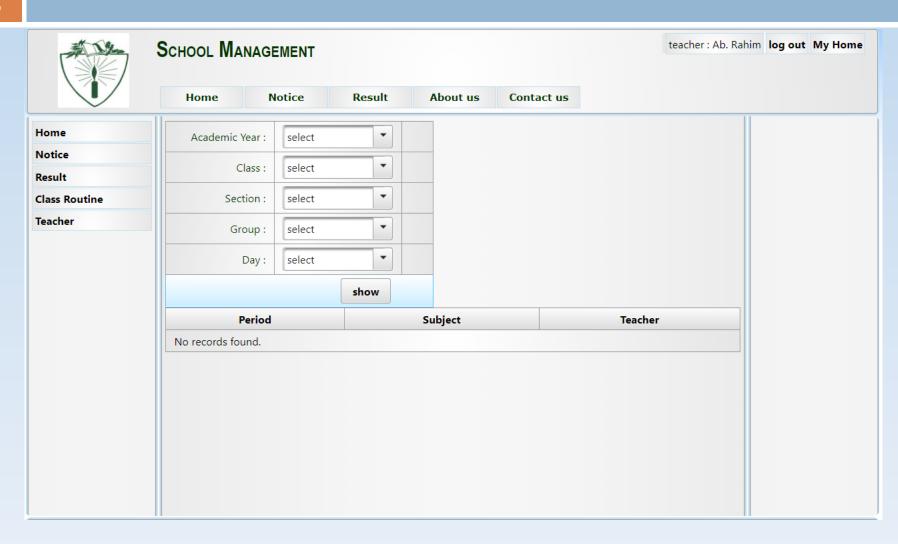
Home Page



Result



Class Routine



Benefits of our Technologies

- Java based systems are the most secured systems in the world.
- Securities that we provide will be of OWASP standards.
- Hack proof systems.
- Multithreaded.
- Can be accessed from anywhere in the world.
- Staging of Roles.

Hardware Requirement for Demo

- □ 4GB RAM
- 40GB Hard Disk
- □ Dual-core 1.8 GHz

Hardware Requirement for Data Centre

- □ 16GB RAM
- □ 40GB SSD Hard Disk
- Dual-core 1.8 GHz (Minimum)
- Dual-core 2.8 GHz (Recommended)



Thank You!