

# SOFTWARE DESIGN DESCRIPTIONS



## ONLINE ELECTION MULTI POLL SYSTEM

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## **1. Introduction**

## **1.1 Purposes**

This document was made on basis of Software Requirements Documentation so all requirements of user was taken into account. However some changes concerning design of develop OEMPS can be brought after studying by developer of Software Design Descriptions (SDD). Main goal of SDD is description of design and structure of OEMPS system's interface. The document is intended first of all for reporting about implemented work to user. It focuses on the capabilities and facilities provided by this System. The details of what all are the needs and advantage of the *Online Election Multi Poll System* and if it fulfils these needs are detailed in the user case and supplementary specifications.

## **1.2 Abbreviations**

- OEMPS –Online Election Multi Poll System
- PC – Personal Computer
- HDD - Hard Disc Drive
- RAM – Random Access Memory
- UIE – User Interface Engine
- SQL – Structured Query Language

## **1.3 Summary**

Software design document consist:

**Design Considerations** – general description of the software system including its functionality and matters related to the overall system.

**Architectural Strategies** – this part describe design decisions and strategies that affect the overall organization of the system and its higher-level structures.

**System Architecture** – this part gives high-level overview of how the functionality and responsibilities of system were partitioned and then assigned to subsystems.

**Policies and Tactics** – in this part of design document we describes design policies and tactics which effect on details of the interface and implementation of various aspects of the system

## **2. System Overview**

The Dream of Online Election Multi Poll System for all the requirements defined by the Authority which fulfill the user desire. Online Election Multi Poll System will allow to perform all necessary procedures for Election Authority and voter/user. For user interface the software to be developed will consist some databases.

- poll's database (pollid,question,startdate,enddate)
- polls\_choices  
database(choiceid,curresponding\_pollid,choicename)
- User's database
- Access-based secure database which store information about responses till result declaration.

### **3. Design Considerations**

#### **3.1 Assumptions and Dependencies**

##### 3.1.1 Related software, hardware and operating system

OEMPS will be executed on Intel based platoforms and under following systems: Windows,Ubuntu.

##### 3.1.2 End-user characteristics

There is no special requirements for users because of OEMPS system will be quite easy in apply. Only knowledge of English (all interface is going to be represented in this language) and ordinary skill of different web-browsers' are required.

### 3.1.3 Possible and/or probable changes in functionality

All new user's and candidates requirements will be taken into account. But since performance's term is insignificant so probability of changes in functionality.

## 3.2 **General constraints**

### 1) For user home PC and E-library

#### Hardware

- IBM-compatible PC with Pentium and higher
- RAM: 1 **gigabyte** (GB) for 32-bit or 2 GB for 64-bit
- 16 GB for 32-bit OS 20 GB for 64-bit OS free space on

#### HDD

#### Software

- MS Windows 7/10
- Ubuntu 16.04/18.04

### 2) For Server

#### Hardware

- 16 GB for 32-bit free space on HDD

- RAM: 2 GB for 64-bit
- No need of Internet connection, need of local host server

### 3) For OEMPS's interface

- Interface will be implemented in English
- To each user status should be appropriated
- OEMPS should be implemented as web-based software

## **3.3 Goals and guidelines**

Main principle of creating OEMPS system is to reduce work load of election authority. It is possible to make election for many post at a single duration. Result calculation and declaration will be fully depend on secure OEMPS machine ,so malicious person's interfere is not possible. Design of E-LMS system will be very simple because of two reasons:

- OEMPS's interface has to be similar to ordinary tick mark question-answer.
- Implementation term is quite compact.

## **4. Architectural Strategies**

- All data (users, polls, polls choices) will be stored in a NIF-database (SQL server will be used for storing data) ;

- User Interface Engine will provide interactions of OEMPS with user through local host server.
- OEMPS database management (after every registration and response insertion in OEMPS database) is carried out by OEMPS System Engine.
- All components of OEMPS system easily can be modified so it is possible to extend developing system in future according to particular election session;
- Authority will have all necessary functions and instructions for controlling database.

## 5. System Architecture

Online Election Multi Poll System has some components:

- Database for storing different types of data such as users, polls and so on managed by an SQL database server.
- The languages that shall be used for coding the Online Election Multi Poll System are Active Server XAMPP Control Panel V3.2.2, HTML, CSS, PHP, SQL database. For working on the coding phase of the Online Election Multi Poll System, the Internet Information Services (IIS) Server needs to be installed.



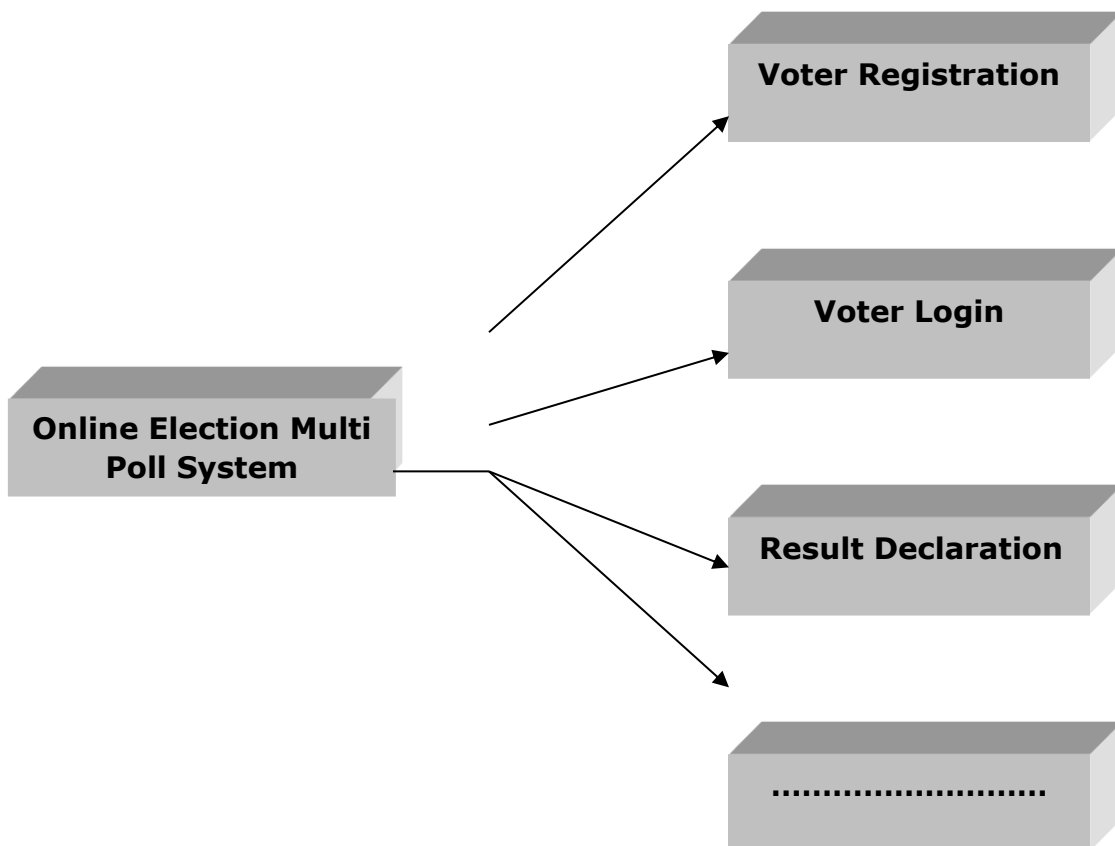
- User Interface Engine (by means of this server user's interact with database through the local server host web.

## **Users' personal computers**

**Database.** Database is intended for storing different types of data such as details of users, books etc.

**SQL server.** This server is intended for Database management. It receives commands from E-Library System Engine and according its demanding take data from database.

### **OEMPS Engine.**



**User Interface Engine (UIE).** UIE allows to work with OEMPS system by means of Web-browser (through the web). It can be implemented in PHP script language for connection between server database and user web interface. UIE interacts with OEMPS Engine by means of byte stream protocol. This protocol allows to provide interaction between programs realizing user interface (Web or Windows) and core of E-LMS. Byte stream protocol consist from set of messages of certain types such as request for registration, registration's result, request for search, result of search, comment, change their own password, and others.

**Windows Application.** This allows to work with OEMPS system directly without applying web browser on basis of Windows operating system.

OEMPS system can be divided into two main parts. The first part is User side and the second is a Server side.

User side usually consist from personal computer with the Web-Browser connected to local host server or PC with installed OEMPS software connected to OEMPS engine (if user apply OEMPS system by means of library's computers

Voter will be able to perform the following operations:

- Register to the system.
- Login to the system.
- Select the poll for which user want to vote.
- Choose an option for that poll.

- Do point 3 and 4 for all poll.
- Click on “ClickOver”, if user has voted for all poll.
- Click on “NewVoter”, if user hasn’t register.

Authority will be able to perform the following operations:

- Allow user to register.
- Enter the pollid for which authority has to declare the result.
- Declare result for all poll.

## **6. Policies and Tactics**

OEMPS system is developing according to requirements. Main functionality and logic of system are provided by Web Server and SQL server. E-LMS provide end users with friendly interface.

If some problems occur during software applying library staff should address to technical support service.

## **7. Detailed System Design**

For use OEMPS system first of all Voter has to register .For this he/she need to provide unique userid (collegeid) ,strong password ,name and he/she has to show their collegeid to authority then only they will give permission to register to system.

## Voter registration page ahead authority

**ELECTION REGISTRATION PAGE**

# REGISTER TO VOTE!

1.USERID:

2.PASSWORD:

3.NAME:

Activate Windows  
Go to Settings to activate Windows.

Your VOTE is your VOICE

\_After registration Voter has to login for voting.

# User Login Page



**OLX LOGIN PAGE**

1.USERID :

2.PASSWORD:

- Userid: he /she has to enter their collegid.
- Password: he/she has to enter their password.

After valid login user will get poll page with many questions.  
After click on each question user will get candidates name



## Poll Page With Questions



• [what is your favourite colour?](#)

• [who is your science and technology sac?](#)

• [who is your sports sac?](#)

[New Voter](#)

[ClickOver](#)

Activate Windows  
Go to Settings to activate Windows.

## Candidates/options page



**who is your sports sac?**

☐ khemu

☐ shreru

☐ sweety

☐ vaishali

[Submit answer](#)

<http://localhost/phppoll1/vote.php>

Activate Windows  
Go to Settings to activate Windows.

PUT POLL NUMBER FOR WHICH POLL YOU WANT THE RESULT

-->POLLNUMBER:

Activate Windows  
Go to Settings to activate Windows.

THE ELECTION IS COMPLETED , THANKS TO USE THIS ELECTION SYSTEM.

- jaychand --(0.00%)
- bheem --(66.67%)
- sonu --(33.33%)
- raychand --(0.00%)

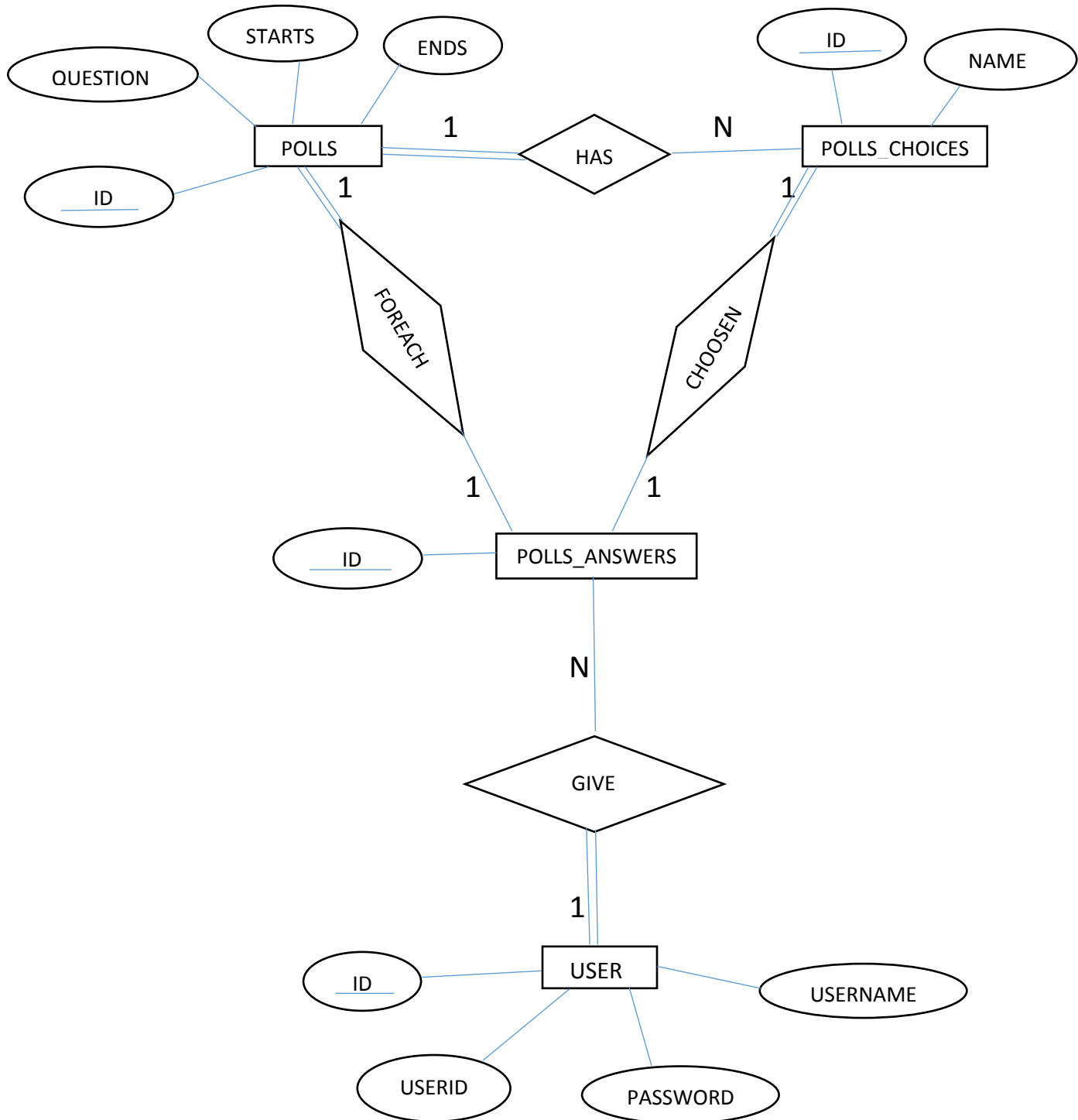
[NextPollResult](#)

[Over](#)

**Election Results**

Activate Windows  
Go to Settings to activate Windows.

## 8. E-R DIAGRAM OF Online Election Multy Poll System





## 9. RELATIONAL SCHEMA OF Online Election Multy Poll System

### USERS

<u>ID</u>	USERID	PASSWORD	USERNAME
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### POLLS

<u>ID</u>	QUESTION	STARTS	ENDS
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### POLLS CHOICES

<u>ID</u>	POLL	NAME
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### POLLS ANSWERS

<u>ID</u>	USER	POLL	CHOICE
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