GLA UNIVERSITY

TOPIC: MINI PROJECT SYNOPSIS

ON

DAM MANAGEMENT SYSTEM

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DECLARATION

We hereby declare that the work which is being presented in the project “Dam Management System”, in partial fulfillment of the requirements for the award of the Bachelor of Technology in Computer Science and Engineering and submitted to the department of Computer Engineering and Applications of GLA University, Mathura. It is an authentic record of our own work carried under the supervision of Mr. Akash Chaudhary, Technical Trainer, Dept of CEA and GLA University.

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Introduction

1.1 Overview of the Project

A Data base Management System (DBMS) is a general-purpose software system that allows creation, definition and manipulation of a database, allowing users to store, process and analyze data easily. A Data base Management System (DBMS) provides us with an interface tool, to perform various operations like creating data base, storing data in it, updating data, creating tables in the database and a lot more. Modern Database Management Systems (DBMS) also provide protection and added security features to the databases. In addition it also maintains data consistency in case of multiple users. Some examples of the most commonly used Database Management Systems are My SQL, ORACLE DB, Mongo DB, etc.

1.2. About the Project

Dam details are currently using a manual system for the management and maintenance of critical information. To maintain the papered data is very critical and it is time consumable process. The current system requires numerous paper forms, which stores data throughout the dam management infrastructure. Often information is incomplete or does not follow management standards. If the paper records are lost due to any problem the river control may leads to floods. Forms are often lost

in transmit between departments requiring a comprehensive auditing process to ensure that no vital information is lost. Multiple copies of the same information exist in the state water department and may lead to inconsistencies in data in various data stores.

1.3 Reason to choose this project

Rivers are the essential part of our lives, providing best needs facilities to people suffering from various water problems which may due to change in climate, increased workload, needs etc. it is necessary for the dams to keep track of its day-to-day activity & records of rivers, flow of water that keep the dam to work run smoothly & successfully. But keeping track of all the activities and their records on paper is very difficult. It is also very inefficient and time-consuming process. Observing the increase in population and number of people visiting the dam/reservoir recording & maintaining all the records is highly unreliable, inefficient and error prone. It is also not economically & technically feasible to maintain these records in paper.

1.4 Future Scope of the Project

Recently, we can see an increasing amount of dam damage or failure due to aging, earthquakes occurrence and unusual changes in weather. For this reason, dam safety is gaining more importance than ever before in terms of disaster management at a national level. Therefore, the government is trying to come up with an array of legal actions to secure consistent dam safety. Other dam management organizations are also taking various institutional and technical

measures for the same purpose. The Korea Water Resource Corporation (K-water) which is currently operating and managing 30 large dams has developed a dam safety management system, KDSMS, for consistent and efficient dam safety management. The KDSMS consists of dam and reservoir data, a hydrological information system, a field inspection and data management system, instrumentation and monitoring system including earthquake monitoring, a field investigation and safety evaluation system, and a collective information system.

1.5 Working Methodology of the project

- Admin Module
- User Module

Admin Module

1 Login: Can login to the system with the correct login credentials.

2 View: Can view the dam and check whether there is an overflow.

3 Manage: Can manage the dam by informing the details about the dam to officials.

User Module

1 Login: Can login to the system with the correct login credentials.

2 View: can view the details of the dams near to them.

3 Update: can update the dam details.

Details About The Hardware Requirements:

Software Requirements:

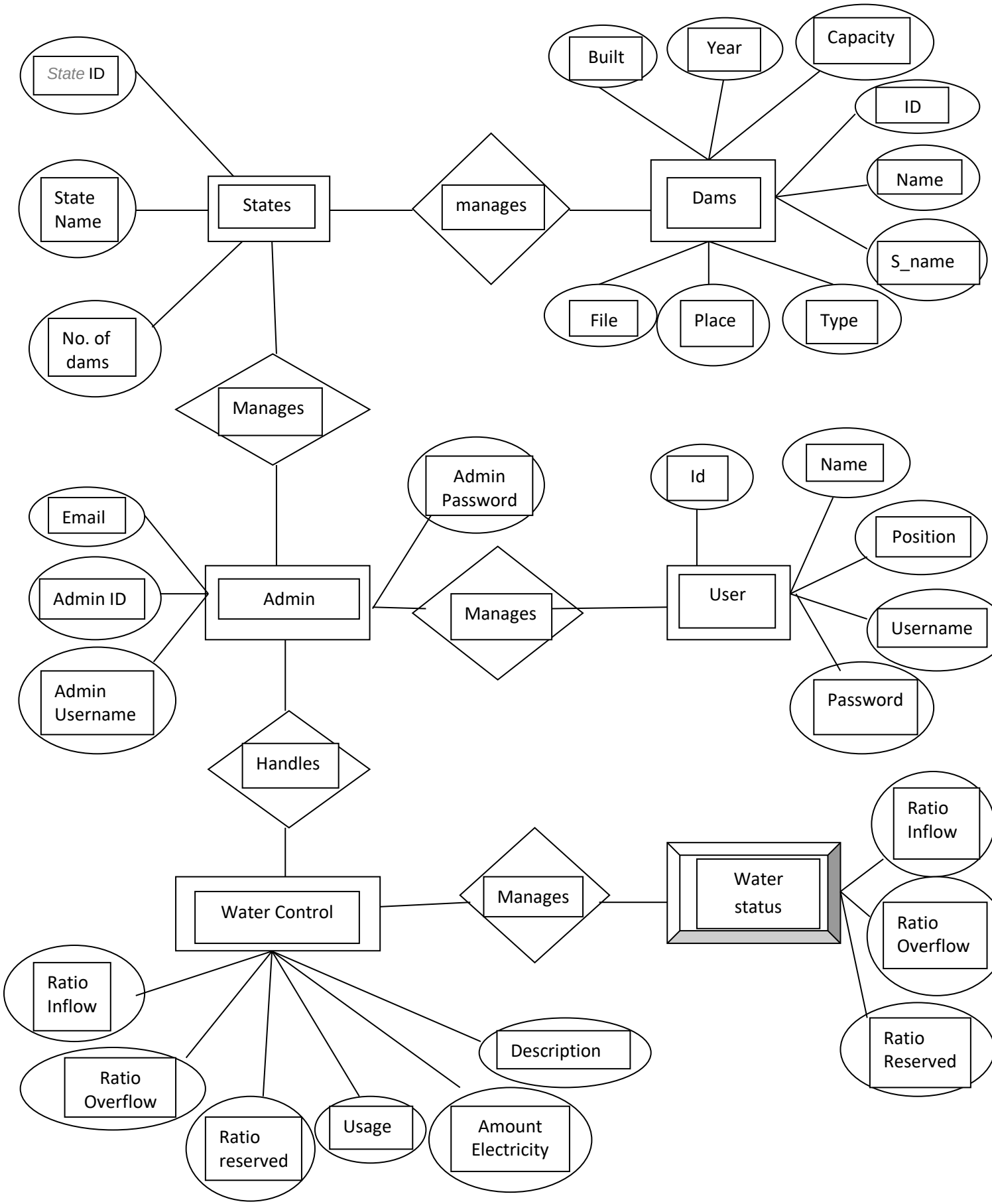
We use the following software requirements:

- Operating system : Windows 7 and above/macOS/ Linux
- Coding language : HTML5, CSS, Bootstrap, PHP
- Editor and Tools : VS Code, Xampp
- Database : MySQL

Hardware Requirements:

- Processor: Intel i3 2nd generation and above
- RAM: 4GB .
- Hard disk: 50GB
- Input devices: keyboard, mouse

Data Flow Diagram



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