MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION

GOVERNMENT POLYTECHNIC, AWASARI (KH)

TAL – AMBEGAON, DIST – PUNE – 412405

ACADEMIC YEAR **:** **2021-22**

COURSE NAME **:** **Software Engineering**

COURSE CODE **:** **22413**

BRANCH **:** **INFORMATION TECHNOLOGY (SY)**

TOPIC NAME **:** **Online E-voting Management System.**

DETAILS OF TEAM MEMBERS

SR. NO.	NAMES OF GROUP MEMBERS	ROLL NO.	ENROLLME NT NO.
1	Hajare Shruti	20IF261	2010510527
2	Hande Tanvi	20IF262	2010510528
3	Jadhav Nageshwar	20IF263	2010510529
4	Kale Manoj	20IF264	2010510530
5	Adsare Gandharv	20IF265	2010510538
6	Naiknavare Sahil	20IF266	2010510193

GUIDANCE BY

MRS. P. C. FAFAT

GROUP LEADER

MANOJ KALE

PART A – A MICRO PROJECT PROPOSAL

Title of Microproject : Online E-voting Management System.

1.0 Aims / benefits of micro-project :

1) To achieve knowledge about software developing.
2) Learn to develop software projects based on online voting management.
3) Securing & developing software and good communication between group members.

2.0 Course Outcomes (COs) : -

CO1: Select suitable software process model for software development.

CO2: Prepare Software requirement specification.

CO3: Use software modelling to create data designs.

CO4: Estimate size and cost of software product.

CO5: Apply project management and quality assurance principles in software development.

3.0 Proposed Methodology: -

Electronic voting (also known as e-voting) is voting that uses electronic means to either aid or take care of casting and counting votes. Depending on the particular implementation, e-voting may use standalone electronic voting machines (also called EVM) or computers connected to the Internet. It may encompass a range of Internet services, from basic transmission of tabulated results to full-function online voting through common connectable household devices. The degree of automation may be limited to marking a paper ballot, or may be a comprehensive system of vote input, vote recording, data encryption and transmission to servers, and consolidation and tabulation of election results. A worthy e-voting system must perform most of these tasks while complying with a set of standards established by regulatory bodies, and must also be capable to deal successfully with strong requirements associated with security, accuracy, integrity, swiftness, privacy, auditability, accessibility, cost-effectiveness, scalability and ecological sustainability

4.0 Action plan: -

Sr. No.	details of activity	planned start date	Planned Finished date	Name of Responsible members
1	Group formation and allocation of Micro project title			All team members
2	Information search and required analysis.			All team members
3	Actual project / assembly project			All team members
4	Testing of project			All team members

| 5 | Acquire the printout and submit it. | | | All team members |
| 6 | Submission of project. | | | All team members |

Resources Required: -

Sr.no.	Name of Resource	Specification	Qty.	Remarks
1	System	Windows 10	1	
2	Software	Enterprises	1	

GUIDED BY   **H.O.D.**   **PRINCIPAL**

(Mrs. P. C. FAFAT)   **(Dr. D.N. REWADKAR)**   **(Dr. D.R. NANDANWAR)**

DEPARTMENT OF INFORMATION TECHNOLOGY
GOVERNMENT POLYTECHNIC AWASARI
(KHURD)
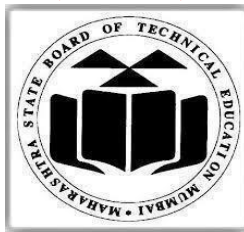
SEMESTER - IV (2021-22)

CERTIFICATE

This is to certify the following students of semester fourth of Diploma in Information Technology of Institute. Government polytechnic, Awasari (kh) (code : 1051) has completed the micro project satisfactorily in subject- Software Engineering for the academic year 2021-22 as prescribed in the curriculum.

SR. NO.	NAMES OF GROUP MEMBERS	ROLL NO.	ENROLLMENT NO.
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(Mrs. P. C. FAFAT)	(Dr. D.N. REWADKAR)	(Dr. D.R. NANDANWAR)

Online E-voting Management System.

1.0 Rationale :

In this project we will get the knowledge about how the E-voting management system actually works. The E-voting management System was one of the earliest changes to improve efficiency. Voting system eventually evolved into the Computer E-voting management system. A E-voting management System is used for the castling the votes of a particular candidate. A worthy e-voting management system must perform most of these tasks while complying with a set of standards established by regulatory bodies, and must also be capable to deal successfully with strong requirements associated with security, accuracy, integrity, swiftness, privacy, auditability, accessibility, costeffectiveness, scalability and ecological, sustainability.

2.0 Aim : - Online E-voting Management System.

2.1 Benefits of the Micro-Project:

- To achieve knowledge about software developing.
- Learn to develop software projects based on online voting management.
- Securing & developing software and good communication between group member

3.0 Course Outcomes (COs) :

CO1: Select suitable software process model for software development.

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CO5: Apply project management and quality assurance principles in software development.

4.0 Literature Review :-

| Books Name	Author Name	Publication
Software Engineering: A practitioners approach	Pressman, Roger S.	McGraw Hill Higher Education, New Delhi.
Software Engineering Concepts	Fairly, Richard	McGraw Hill Education New Delhi.
Software Engineering: Principles and practices	Jain, Deepak	Oxford University Press, New Delhi.

5.0 Actual Methodology Followed :-

First we have selected the micro-project then we gather information of that micro-project after that we distributed project topics first topic selection and topic name is hostel management system by using some books we implement the classes and object then we implement file operation and implementation of some function after some interval we debugged the program and create the E-R diagram for Online E-voting management system after that we run the program on computer system and our output we perform successfully and our final program is ready.

6.0   Actual Resources Used:-

S. No.	Name of Resource/material	Specifications	Qty	Remarks
1	Computer System	Computer (i3-i5 preferable), RAM minimum 2GB	1	
2	Operating System	Windows/Linux	1	
3	Software	Enterprise	1	

7.0 Brief Discription About Microproject :-

Waterfall Model:
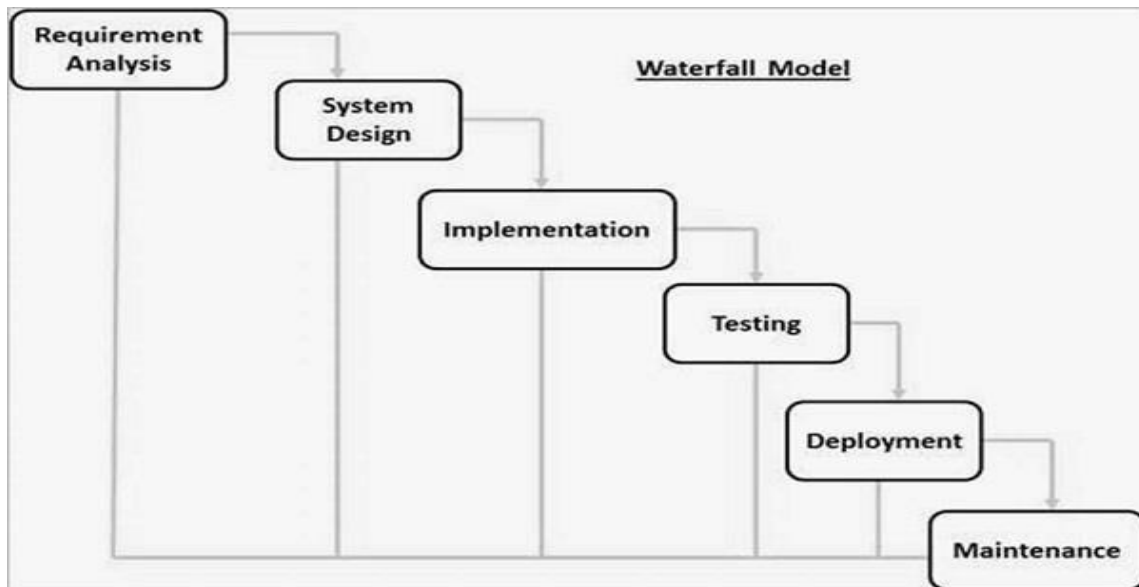
There are times when the requirements of a problem are reasonably well understood – when work flows from communication through deployment in a reasonably linear fashion.

The waterfall model is a traditional method, sometimes called the classic life cycle, suggests a systematic, sequential approach to software development that begins with customer specification of requirements and progresses through planning, modeling, construction and deployment, culminating in on-going support of the completed software.

This is one of the initial models. As the figure implies stages are cascaded and shall be developed one after the other. In other words one stage should be completed before the other begins. Hence,
when all the requirements are elicited by the customer, analyzed for completeness and consistency, documented as per requirements, the development and design activities commence.

This model presents a high-level view and suggests to the developer the sequence of events they should expect to encounter. This model is used to prescribe software development activities in variety of contexts. It is the basis for software deliverables. Associated with each activity are milestones and outcomes, for managers to monitor.

One of the main needs of this model is the user's explicit prescription of complete requirements at the start of development. For developers it is useful to layout what they need to do at the initial stages. Its simplicity makes it easy to explain to customers who may not be aware of software development process. It makes explicit with intermediate products to begin at every stage of development.

One of the biggest limitations is it does not reflect the way code is really developed. Problem is well understood but software is developed with great deal of iteration. Often this is a solution to a problem which was not solved earlier and hence software developers shall have extensive experience to develop such application; as neither the user nor the developers are aware of the key factors affecting the desired outcome and the time needed. Hence at times the software development process may remain uncontrolled.

Today software work is fast paced and subject to a never-ending stream of changes in features, functions and information content. Waterfall model is inappropriate for such work. This model is useful in situation where the requirements are fixed and work proceeds to completion in a linear manner.

Data Flow Diagram :

A data flow diagram (DFD) represents the flow of information through a system. DFDs quickly became a popular way to visualize the major steps and data involved in software-system processes.
 What is DFD?

A data-flow diagram (DFD) is a way of representing a flow of data of a process or as system (usually an information system), for example :
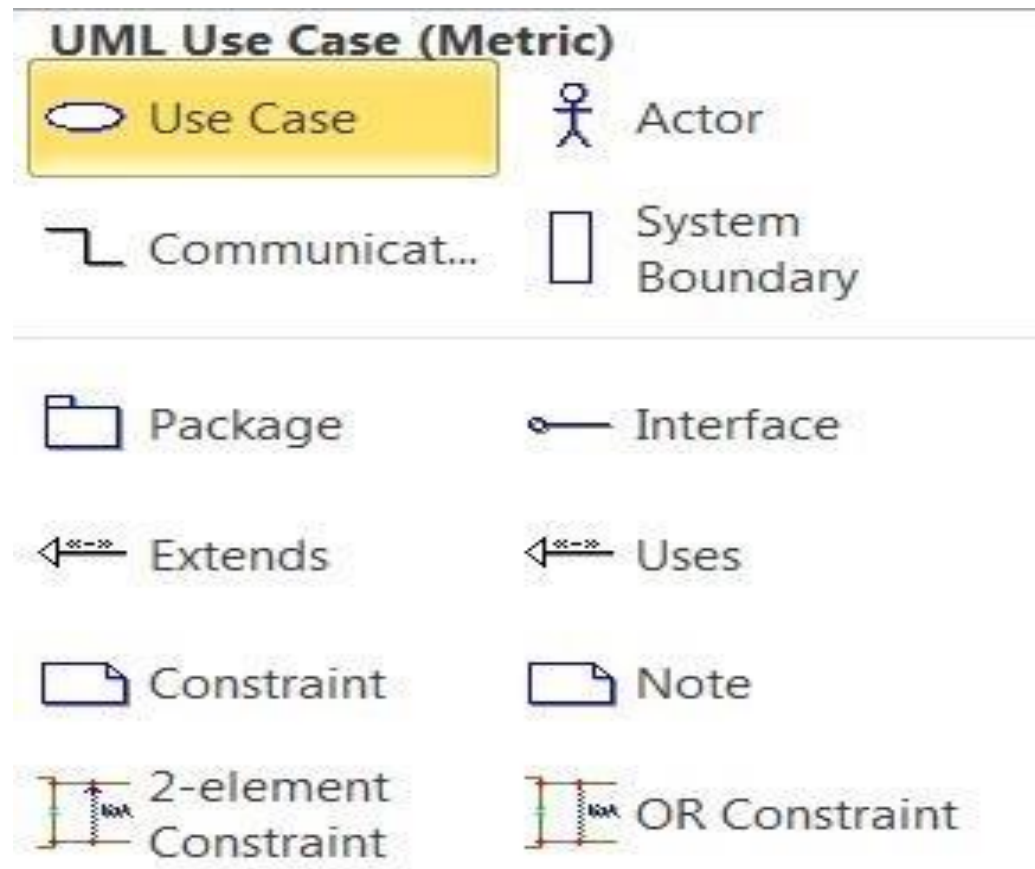
- Where Data Comes From
- Where It Goes
- How It Gets Stored

Data Flow Notation
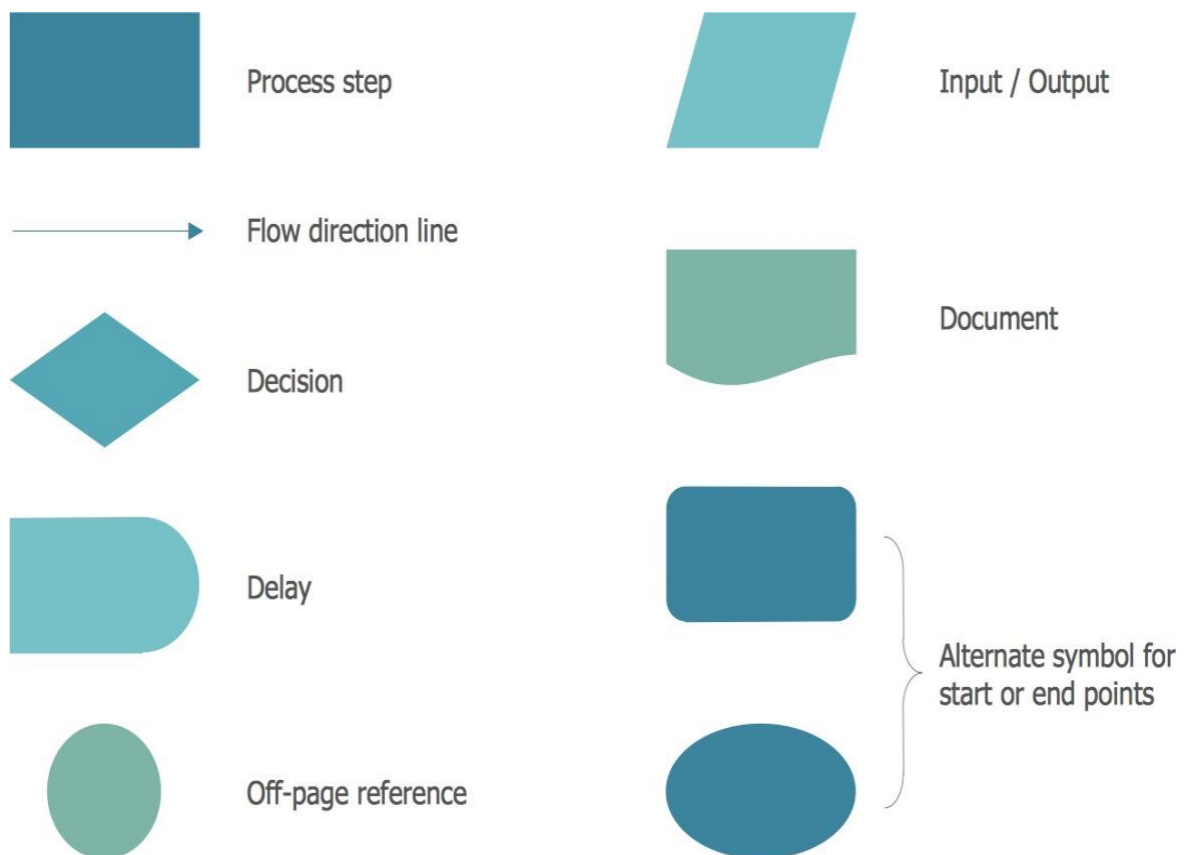
Use Case Diagram

Use case diagrams specify how the system interacts with actors without worrying about the details of how that functionality is implemented. Draw your system's boundaries using a rectangle that contains use cases. Placeactors outside the system's boundaries.

UML Use Case (Metric)

Use Case	Actor
Communicat...	System Boundary
Package	Interface
Extends	Uses
Constraint	Note
2-element Constraint	OR Constraint

E-R Diagram

An entity–relationship model (or ER model) describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types (which classify the things of interest) and specifies relationships that can exist between entities.
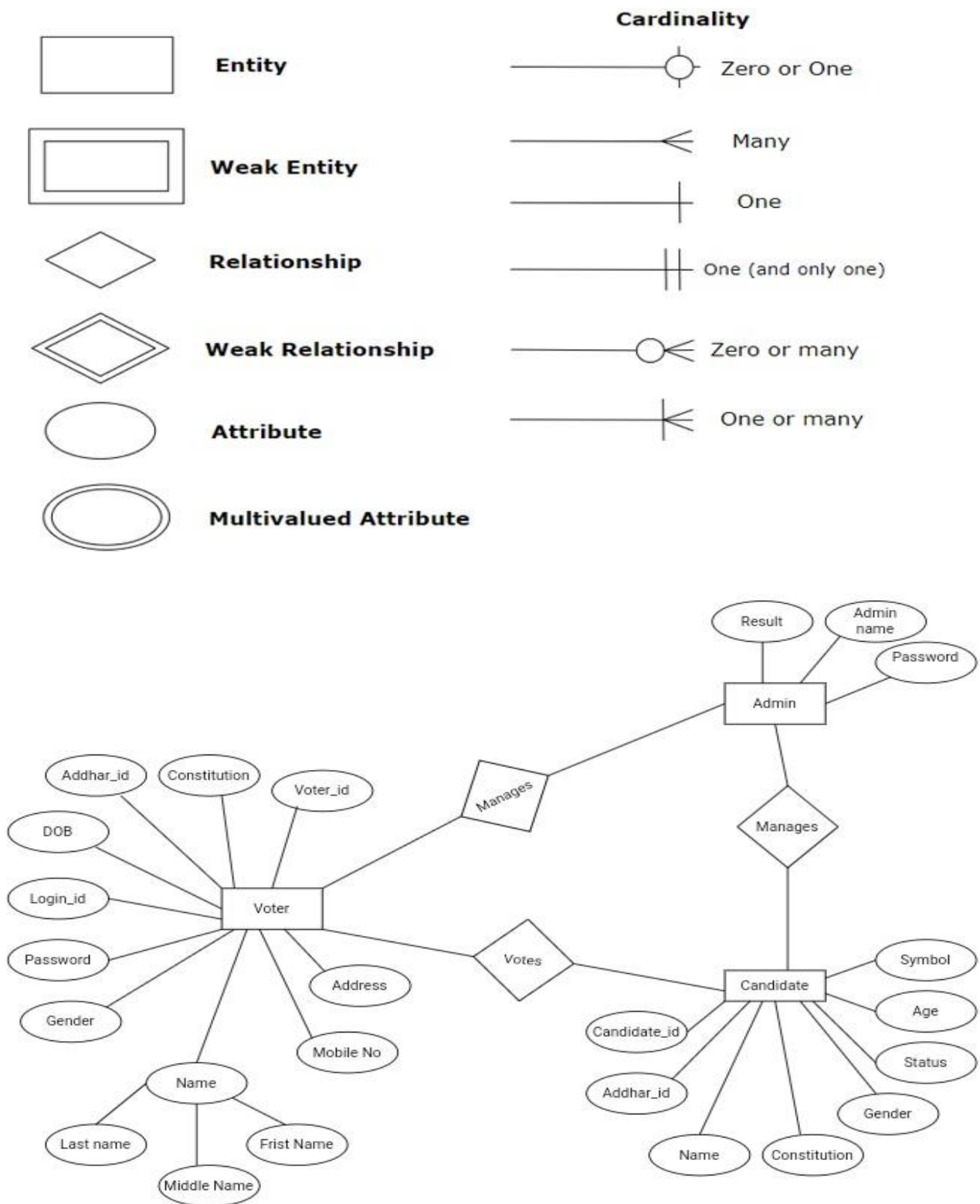
8.0 Applications of Micro-Project :-

1. User friendliness provided in the application with various controls.

2. The system makes the overall project management much easier and flexible.

3. It provides high level of security with different level of authentication.

9.0 Conclusion :-

This project offers user to enter the data through simple and interactive manner. User is provided the option of only view the records he entered earlier. Data storage and retrieval will become faster and easier to maintain.