

HIGHER TECHNICAL INSTITUTE



COURSE IN COMPUTER STUDIES

DIPLOMA PROJECT  
(PROJECT REPORT)

# Creation of an E-Voting site

CS/352

ANDRI HADJIPANAYI  
MARIA GALAKTIOU

7 JUNE 2006

HIGHER TECHNICAL INSTITUTE	PROJECT NO 3611
----------------------------------	--------------------

## **Executive Summary**

Our system is a Web based project that supports voting through Internet. The facilities that the E-voting system can offer are voting, viewing results, submitting question, registration, to see history results and to Log In and Log Out from the site.

The main operation that the user has to perform is to Register. When the user finishes the registration will be able to perform more operations. The operations that will be able to perform are Voting, Viewing, Submitting Questions, changing his personal profile, Log In and Log Out from the system.

The vote operation supports the facility to vote for questions that are already entered in the system. When you press to vote you will have the opportunity to choose between many subjects of questions. When you decide which subject you are going to vote then you will be transferred to another page and view the options of that question and decide the best answer for you to submit your vote.

The View operation supports the opportunity to choose the way to see the results. You can view results by summary, by question and with combination of questions. When you choose the way to view the results you will be able to view a graph containing the statistics. When a user is non-register he/she can view results about question that the users can not submit their vote anymore.

Furthermore we have the operation of Submitting Questions. With this operation the user will be able to enter his/her question for any subject in the system. When the user submits his/her question he/she will enter also the options for that question.

There is also another operation where the user can change his /her profile, which is his/her personal detail. The user will have two opportunities to modify his/her profile. First, in Registration time the user will be asked if he/she wishes to change his/her personal information. And second opportunity will be presented at the General Page when the user is logged in.

The user also can have the opportunity to use the Login operation. When the user wants to Login he/she has to enter his/her username and password which he/she has submitted through Registration. When you are logged in you can use the facilities of voting, viewing and submitting questions. If a user forget his/her password then by submitting his username an email will be send with username and password.

Also, there is the Log Out operation, when you are register. This operation enables you to exit from the system. When you finish with the operations you want, you can Log Out from the system.

From the beginning we defined goals and objectives of our system. We started implementing Analysis and General Design phase, we decided how

the structure of the database was going to be. We spend almost 12 weeks implementing the coding of the system and at the same time we were testing the several modules.

For the completion of the system we installed Java Development Tool 1.5.0\_06 for implementing our code. Also we installed Apache Software for building the server of the system. We also installed MySQL Query Browser 1.1 and MySQL Server 5.0 for building the database.

We faced some problems at the beginning regarding the connection with the database. We decided to use MySQL Server 5.0 for the reason that Oracle was not connecting with Java Development Tool 1.5.0\_06 because Oracle had its own version of Java.

# TABLE OF CONTENTS

Chapter	Page
Introduction .....	1
1. Investigation Phase.....	2
1.1. Initial Investigation Activity .....	3
1.1.1. Information about the organization.....	3
1.1.2. Information about the people .....	4
1.1.3 Information about the work .....	5
1.1.3 Conclusion.....	7
1.2. Feasibility Study .....	8
1.2.1 Introduction.....	8
1.2.2 Recommendations.....	9
1.2.2.1 First Recommendation.....	9
1.2.2.2 Second Recommendation.....	11
1.2.2.3 Third Recommendation.....	13
1.2.3 Conclusion.....	15
2. Analysis and General Design Phase.....	16
2.1. Goals and Objectives.....	16
2.2. System Functions.....	16
2.3. Requirements of the system.....	17
2.3.1 Business Requirements.....	17
2.3.2 User Requirements.....	17
2.3.3 System Requirements.....	17
2.3.4 Functional Requirements .....	18
2.4. Processing.....	18
2.4.1 Major Modules.....	18
2.5. Data Flows Diagrams.....	20
2.6. Data Dictionary.....	20
2.6.1 Data Elements.....	20
2.6.2 Data Structures.....	20
2.6.3 Data Stores.....	20
2.6.4 Processes .....	20
2.7. Inputs.....	20
2.8. Outputs.....	20
3. Detailed Design and Implementation Phase.....	21
3.1. Technical Design.....	21
3.1.1. Detailed Design Specification Document.....	21

3.2. Testing Specification and Planning .....	22
3.2.1. Test Plan.....	22
3.3. Programming and Testing.....	24
3.3.1. The Process of Programming and Testing.....	24
3.4. System Testing .....	25
3.4.1. Complete system Testing.....	25
3.5. Conclusion.....	25
4. Installation Phase.....	26
4.1. System Installation.....	26
4.1.1. Installation method.....	26
4.2. Conclusion.....	26
5. Review Phase.....	27
5.1 Post-Implementation.....	27
5.1.1. Activity Description.....	27
5.1.2. Post Implementation Review Report.....	27
5.2. Conclusion.....	27
APPENDIXES	
Appendix A.....	28
Appendix B.....	29
Appendix C.....	30
Appendix D.....	31
Appendix E.....	32
Appendix F.....	33
Appendix G.....	34