Software Project Scheduling (Front-end)



Supervised by Dr. M.A. Khan

By

Muhammad Imran Ismail (233001-011)

Faculty of Computer Sciences
Bahria Institute of Management and Computer Sciences
Islamabad.

Software Project Scheduling (Front-end)

By

Muhammad Imran Ismail

Project submitted to the Faculty of Computer Sciences, Bahria Institute of Management and Computer Sciences, Islamabad.

In partial fulfillment of requirement for the degree of BCS (Hons).

Approved by:

Project Supervisor

Internal Examiner

External Examiner

Head of Department

Dedication

This project is dedicated to our loving parents and family who supported us on every turn and saw us through every difficulty.

Acknowledgements

The role of team member in creating the project and report consists on a test to explain those topics that will be most valuable to the project. And, also admit to the whole responsibility for any error found therein and acknowledge to any shortcomings that may be perceived in the report. However, simply writing the report is only one part of the task of producing this project. There are a number of individuals who participate in this effort. Same is the case with this report and many people need to be thanked here.

Many words of thanks for the supervisor **Dr. Mehmood Anwar Khan.** He kept us encouraging all the time and provided guidance whenever it was required. He made valuable contributions, without which this report and project would be deficient. He deserves and receives our sincere thanks for his participation.

Atif Shahbaz Mirza

Muhammad Imran Ismail

Abstract

The objective of this project in making SPS (Software Project Scheduling).In today's highly competitive world Management has always played a leading role in any organization's success. Now a days, one of the most critical concerns of any fast growing organization is to manage their human resources and productivity in a more efficient and optimized manner, so that they can utilize their human resources on their project or tasks in the most appropriate way. In order to address these concerns one needs to have an integrated environment where projects, employees and their activities are monitored and controlled.

By utilizing organization's resources properly, can have healthy and positive effects on the performance. In this project we try to manage the project's schedules and a little portion of organization's human resource by a web based product. It will maintain the project's schedules (dates information, task's team information) about the projects of the organization.

Table of contents

DEDICATION	i
ACKNOWLEDGEMENTS	ii
ABSTRACT	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	viii
LIST OF INTERFACES	viii
CHAPTER 1	1
INTRODUCTION	1
1. INTRODUCTION	2
1.1. THE PURPOSE OF THE PROJECT	3
1.1.1. BACKGROUND TO THE PROJECT EFFORT 1.1.2. GOAL OF THE PROJECT	3 4
1.2. CLIENT AND CUSTOMER	4
1.2.1. CLIENT 1.2.2. CUSTOMER	4 5
1.3. THE USER OF THE PRODUCT	5
1.3.1. EMPLOYEE1.3.2. MANAGERS1.3.3. ADMINISTRATOR1.3.4. THE PRIORITIES ASSIGNED TO USERS	5 5 5 6
1.4. MANDATED CONSTRAINTS	6
1.4.1. SOLUTION CONSTRAINTS1.4.2. WHY ASP1.4.3. OPERATING SYSTEM1.4.4. ANTICIPATED WORKPLACE ENVIRONMENT	6 6 7 7
1.5. NAMING CONVENTIONS AND DEFINITIONS	7
1.5.1. Manager 1.5.2. Administrator 1.5.3. User 1.5.4. Templates 1.5.5. Skills 1.5.6. Questions 1.5.7. Scheduler 1.5.8. Team	7 7 8 8 8 8 8 9
CHAPTER 2	10
REQUIREMENTS OF THE SYSTEM	10

2. INTRODUCTION	11
2.1. THE SCOPE OF THE WORK	12
2.1.1. CONTEXT DIAGRAM	12
2.2. THE SCOPE OF THE PRODUCT	13
2.2.1. PRODUCT BOUNDARY	13
2.3. GOALS	14
2.4. SYSTEM FUNCTIONS	15
2.5. REQUIREMENT SHELL	17
2.6. LOOK AND FEEL REQUIREMENTS	32
2.6.1. The Interface	32
2.7. USABILITY REQUIREMENTS	32
2.7.1. Ease of Use	32
2.7.2. Ease of Learning	33
2.8. OPERATIONAL REQUIREMENTS	33
2.8.1. Expected Technological Environment	33
2.8.2. Supportability	33
2.9. MAINTAINABILITY AND PORTABILITY REQUIREMENTS	34
2.9.1. MAINTAIN THE PRODUCT	34
CHAPTER 3	35
SYSTEM DESIGN	35
3. INTRODUCTION	36
3.1. DESIGN CONSIDERATIONS	37
3.1.1. HARDWARE AND SOFTWARE ENVIRONMENT	37
3.1.2. WHY ASP	37
3.1.3. DBMS	37
3.2. SEQUENCE DIAGRAMS	38
3.2.1. SIGN IN 3.2.2. ADD USER	38 39
3.2.3. ADD DEPARTMENT	40
3.2.4. ADD DESIGNATION	41
3.2.5. ADD MAIN PROJECT	42
3.2.6. ADD QUESTION	43
3.2.7. ADD SKILL	44
3.2.8. ADD TASK	45
3.2.9. CHANGE PASSWORD 3.2.10. COMPOSE MESSAGE	46
3.2.11. EDIT EMPLOYEE	47
3.2.12. EDIT EMPLOYEE 3.2.12. EDIT EMPLOYEE STATUS	48
3.2.13. VIEW EMPLOYEE HISTORY	50

3.2.14. VIEW EMPLOYEE STATUS	51
3.2.15. VIEW MESSAGES	52
3.2.16. VIEW PROJECTS	53
3.2.17. ADD TEMPLATE	54
3.2.18. EVALUATE PROJECT	55
3.2.19. EVALUATE TEAM	56
3.2.20. EVALUATE EMPLOYEE	57
3.3. SYSTEM INTERFACES	58
3.3.1. STARTUP PAGE	58
3.3.2. MANAGER USER INTERFACE	59
3.3.2.1. MANAGER CONTROL PANEL	59
3.3.2.2. PROJECT CONTROL PANEL	60
3.3.2.3. ADD PROJECTS	61
3.3.2.4. EDIT PROJECTS	62
3.3.2.5. DELETE PROJECTS	63
3.3.2.6. VIEW TEAMS	64
3.3.2.7. VIEW PROJECTS	65
3.3.2.8. EVALUATION	66
3.3.2.9. VIEW EMPLOYEE	69
3.3.2.10. VIEW PROJECT EVALUATION TEMPLATE	70
3.3.2.11. EMPLOYEE EVALUATION TEMPLATE	71
3.3.2.12. TEAM EVALUATION TEMPLATE	72
3.3.2.13. VIEW PROJECT TYPE	73
3.3.2.14. VIEW SKILLS	74
3.3.2.15. VIEW QUESTIONS	75
3.3.2.16. ADD PROJECT EVALUATION TEMPLATE	76
3.3.2.17. ADD EMPLOYEE EVALUATION TEMPLATE	77
3.3.2.18. ADD TEAM EVALUATION TEMPLATE	78
3.3.2.19. ADD PROJECT TYPE	79
3.3.2.20. ADD SKILL	80
3.3.2.21. ADD QUESTIONS	81 82
3.3.2.22. EDIT PROJECT TYPE	
3.3.2.23. EDIT SKILL	83 84
3.3.2.24. EDIT QUESTIONS	85
3.3.3. USER PROFILE INTERFACES	85
3.3.3.1. USER CONTROL PANEL	86
3.3.3.2. SEND EMAIL	87
3.3.3.3. EMPLOYEE HISTORY 3.3.3.4. VIEW MESSAGES	88
3.3.3.4. VIEW MESSAGES 3.3.3.5. CHANGE PASSWORD	89
3.3.3.6. VIEW USER PROFILE	90
3.3.3.7. PROJECT INFORMATION	91
3.3.3.8. TEAM INFORMATION	92
3.3.4. ADMINISTRATOR USER INTERFACES	93
3.3.4.1. ADMINISTRATOR OSER INTERFACES 3.3.4.1. ADMINISTRATOR CONTROL PANEL	93
3.3.4.2. ADD & EDIT EMPLOYEE PROFILE	94
3.3.4.3. WEB MANAGER	95
3.3.4.3.1. ADD NEW PAGE	95
	75

3.3.4.3.2. ADD SUB PAGE	96
3.3.4.3.3. ADD NEW PAGE	97
3.3.4.3.4. PAGE EDITOR	98
3.3.4.3.5. MAIN PAGES CONTROLLER	99
3.3.4.4. EMPLOYEE HISTORY	100
3.3.4.5. EMPLOYEE STATUS	. 101
3.3.4.6. SKILL MANAGER	102
3.3.4.7. EMPLOYEE STATUS MANAGER	103
3.3.4.8. DEPARTMENT MANAGER	104
3.3.4.9. Designation Manager	105
3.4. DATABASE DESIGN	106
3.4.1.1. Employee's Info Tables	106
3.4.1.2. EMPLOYEE'S INFO TABLES	107
3.4.1.3. WEB MANAGER INFO TABLES	108
3.4.1.4. PROJECT INFO TABLES	109
3.4.1.5. EVALUATION & TEMPLATES INFO TABLES	110
CHAPTER 4	111
TESTING	111
4. INTRODUCTION	112
4.1. TESTING	112
4.1.1. On Line Response	113
4.1.2. TEST DATA	113
4.1.3. TEST PLAN	113
4.1.4. SYSTEM TESTING	114
CHAPTER 5	115
RECOMMENDATIONS	116
5. INTRODUCTION	116
5.1. ONLINE RECOMMENDATIONS	116
5.2. FUTURE RECOMMENDATION	116
5.3. REFERENCES	116
5.3.1. BOOKS	116
5.3.2. INTERNET RESOURCES	116

List of Figures

Fig #	Description	Page
2.1.	Context Diagram	12
2.2.	System Boundaries according to user domain	13
3.1.	Sign In Process Pages Sequence	38
3.2.	Add User Process Pages Sequence	39
3.3.	Add Department Process Pages Sequence	40
3.4.	Add Designation Process Pages Sequence	41
3.5.	Add Main Project Process Pages Sequence	42
3.6.	Add Question Process Pages Sequence	43
3.7.	Add Skill Process Pages Sequence	44
3.8.	Add Task Process Pages Sequence	45
3.9.	Change Password Process Pages Sequence	46
3.10.	Compose Message Process Pages Sequence	47
3.11.	Edit EmployeeProcess Pages Sequence	48
3.12.	Edit Employee Status Process Pages Sequence	49
3.13.	View Employee History Process Pages Sequence	50
3.14.	View Employee Status Process Pages Sequence	51
3.15.	View Messages Process Pages Sequence	52
3.16.	View Projects Process Pages Sequence	53
3.17.	Add Template Process Pages Sequence	54
3.18.	Evaluate Project Process Pages Sequence	55
3.19.	Evaluate Team Process Pages Sequence	56
3.20.	Evaluate Employee Process Pages Sequence	57
	List of Interfaces	
Fig#	Description	Page
3.21.	Startup Page Interface	58
3.22.	Manager Control Panel Interface	59
3.23.	Project Control Panel Interface	60
3.24.	Add Projects Interface	61
3.25.	Edit Projects Interface	62
3.26.	Delete Projects Interface	63
3.27.	View Teams Interface	64
3.28.	View Projects Interface	65
3.29.	Project Evaluation Interface	66
3.30	Team Evaluation Interface	67
3.31	Employee Evaluation Interface	68
3.32	View Employee Interface	69
3.33.	View Project Evaluation Template Interface	70
3.34.	Employee Evaluation Template Interface	71
3.35.	Team Evaluation Template Interface	72
3.36.	View Project Type Interface	73

3.37.	View Skills Interface	74
3.38.	View Questions Interface	75
3.39.	Add Project Evaluation Template Interface	76
3.40.	Add Employee Evaluation Template Interface	77
3.41.	Add Team Evaluation Template Interface	78
3.42.	Add Project Type Interface	79
3.43.	Add Skill Interface	80
3.44.	Add Questions Interface	81
3.45.	Edit Project Type Interface	82
3.46.	Edit Skill Interface	83
3.47.	Edit Questions Interface	84
3.48.	User Control Panel Interface	85
3.49.	Send Email Interface	86
3.50.	Employee History Interface	87
3.51.	View Messages Interface	88
3.52.	Change Password Interface	89
3.53.	View User Profile Interface	90
3.54.	Project Information Interface	91
3.55.	Team Information Interface	92
3.56.	Administrator Control Panel Interface	93
3.57.	Add & Edit Employee Profile Interface	94
3.58.	Add New Page Interface	95
3.59.	Add Sub Page Interface	96
3.60.	Add New Page Interface	97
3.61.	Page Editor Interface	98
3.62.	Main Pages Controller Interface	99
3.63.	Employee History Interface	100
3.64.	Employee Status Interface	101
3.65.	Skill Manager Interface	102
3.66.	Employee Status Manager Interface	103
3.67.	Department Manager Interface	104
3.68.	Designation Manager Interface	105
3.69.	Employee's Info Tables	100
3.70.	Web Manager Info Tables	107
3.71.	Project Info Tables	108
3.72.	Evaluation & Templates Info Tables	109