Table of Contents

1 Introduction 6

1.1 Project Information 6

1.2 Purpose 6

1.3 The People 6

1.4 Background 6

1.5 Problems 7

1.6 Our Proposal 7

1.7 Benefits 7

2 Software Project Management Plan (SPMP) 8

2.1 Problem Definition 8

2.1.1 Name of this Capstone Project 8

2.1.2 Problem Abstract 8

2.1.3 Project Overview 8

2.1.3.1 The Current System 8

2.1.3.2 The Proposed System 8

2.1.3.3 Boundaries of the System 8

2.1.3.4 Development Environment 9

2.2 Project Organization 9

2.2.1 Software Process Model 9

2.2.2 Roles and Responsibilities 10

2.2.3 Tools and Techniques 10

2.3 Project management Plan 11

2.3.1 Tasks 11

2.3.2 Task Sheet: Assignment and Timetable 13

2.4 Coding Convention 15

2.4.1 Naming Convention 15

2.4.2 Lengths 15

3 Software Requirements Specifications (SRS) 16

3.1 User Requirement Specification 16

3.1.1 Common Features 16

3.1.2 Customer 16

3.1.3 Admin 16

3.1.4 Guest 16

3.1.5 System 16

3.1.6 Authorized User 17

3.2 System Requirement Specification 17

3.2.1 External Interface Requirements 17

3.2.1.1 User Interfaces 17

3.2.1.2 Hardware Interfaces 17

3.2.1.3 Software Interfaces 17

3.2.1.4 Communications Protocol 17

3.2.2 System Features 18

3.2.2.1 Admin 19

3.2.2.1.1 Login 20

3.2.2.1.2 View Category 21

3.2.2.1.3 Create Category 22

3.2.2.1.4 Update Category 23

3.2.2.1.5 Delete Category 24

3.2.2.1.6 Hide Category 25

3.2.2.1.7 Show Category 25

3.2.2.1.8 View User 26

3.2.2.1.9 Active User 27

3.2.2.1.10 Deactive User 28

3.2.2.1.11 Allow User Selling 29

3.2.2.1.12 Disallow User Selling 30

3.2.2.1.13 View Event 30

3.2.2.1.14 Create Event 31

3.2.2.1.15 Update Event 32

3.2.2.1.16 Delete Event 33

3.2.2.1.17 Approve Event 34

3.2.2.1.18 Disapprove Event 35

3.2.2.1.19 View Request 36

3.2.2.1.20 Close Request 37

3.2.2.1.21 View Ticket 37

3.2.2.1.22 Approve Ticket 39

3.2.2.1.23 Update Ticket 39

3.2.2.1.24 Disapprove Ticket 40

3.2.2.1.25 Delete Ticket 41

3.2.2.1.26 View Venue 42

3.2.2.1.27 Create Venue 43

3.2.2.1.28 Update Venue 44

3.2.2.1.29 Delete Venue 45

3.2.2.1.30 Approve Venue 46

3.2.2.1.31 Disapprove Venue 46

3.2.2.1.32 View Transaction 47

3.2.2.1.33 Update Transaction Status 48

3.2.2.1.34 View Setting 49

3.2.2.1.35 Create Setting 50

3.2.2.1.36 Update Setting 51

3.2.2.1.37 Delete Setting 52

3.2.2.2 Customer 54

3.2.2.2.1 View Buy History 55

3.2.2.2.2 Update Transaction Status 55

3.2.2.2.3 View Sell History 56

3.2.2.2.4 Create Request 57

3.2.2.2.5 Close Request 58

3.2.2.2.6 Respond Request 58

3.2.2.2.7 Follow Buy 59

3.2.2.2.8 Unfollow Buy 60

3.2.2.2.9 Follow Sell 61

3.2.2.2.10 Unfollow Sell 61

3.2.2.2.11 Follow Buy and Sell 62

3.2.2.2.12 Unfollow Buy and Sell 63

3.2.2.2.13 View Follow Event List 64

3.2.2.2.13 Buy Ticket 64

3.2.2.2.14 Post Ticket 65

3.2.2.2.15 Edit Posted Ticket 66

3.2.2.2.16 Delete Posted Ticket 67

3.2.2.2.17 Receive Notification 68

3.2.2.2.18 Receive Real-time Notification 69

3.2.2.2.19 View Others Profile 70

3.2.2.3 Authorized User 71

3.2.2.3.1 Change Personal Information 72

3.2.2.3.2 Change Password 73

3.2.2.3.3 View Event Detail 74

3.2.2.3.4 Search Event by Name 75

3.2.2.3.5 Logout 75

3.2.2.4 Guest 77

3.2.2.4.1 Login 78

3.2.2.4.2 Register 79

3.2.2.4.3 View Event Detail 80

3.2.2.4.4 Search Event by Name 81

3.2.2.4.5 Sort Ticket 81

3.2.2.4.6 Sort Event 82

3.2.2.5 Auto System 84

3.2.2.5.1 Notification 84

3.2.2.5.2 Real-Time Notification 85

3.2.2.5.3 Auto Update TranPayment Status 86

3.2.2.5.4 Auto Update Event Status 87

3.2.3 Software System Attributes 88

3.2.3.1 Reliability 88

3.2.3.2 Availability 88

3.2.3.3 Security 88

3.2.3.4 Maintainability 88

3.2.3.5 Portability 88

3.3 Entity Relationship Diagram 89

4 SOFTWARE DESIGN DESCRIPTION 89

4.1 Design Overview 89

4.2 System Architectural Design 90

4.2.1 Choice of System Architecture 90

4.2.2 Discussion of Alternative Designs 91

4.3 Package Diagram 92

4.4 Class Detailed Description 93

4.4.1 DropIt.Models Package 93

4.4.1.1 Class Diagram 93

4.4.1.2 Class Diagram Explanation 94

4.4.2 DropIt.Controllers Package 99

4.4.2.1 DropIt.Controllers 100

4.4.2.2 DropIt.Areas.Administration.Controllers 103

4.5 Sequence Diagram 107

4.5.1 Get list ticket 107

4.5.2 Edit Ticket 108

4.5.3 Delete Ticket 108

4.5.4 Approve Ticket 109

4.5.5 Delivered Transaction 109

4.5.6 Received Transaction 110

4.5.7 Create Event 110

4.5.8 Active User 111

4.6 Activity diagram 111

4.6.1 Create Ticket 111

4.6.2 Request Ticket 112

4.6.3 Buy Ticket 112

4.7 State Diagram 113

4.7.1 Ticket State Diagram 113

4.7.2 Event State Diagram 114

4.8 Algorithm Suggestion Event 115

4.9 Database Design or Data Structures 116

4.9.1 Database diagram 116

4.9.2 Table 116

4.9.2.1 User table 117

4.9.2.2 Ticket table 118

4.9.2.3 Venue table 120

4.9.2.4 Province table 120

4.9.2.5 Event table 120

4.9.2.6 UserFollowEvent table 121

4.9.2.7 Request table 121

4.8.2.8 TicketResponse table 122

4.9.2.9 Category table 122

4.9.2.10 Notification table 123

5 Software Test Documentation (STD) 123

5.1 Introduction 123

5.1.1 System Overview 123

5.1.2 Test Approach 124

5.2 Test Plan 125

5.2.1 Feature to be tested 125

5.2.2 Feature not to be tested 128

5.2.3 Testing Tools and Environment 128

5.3 Test Case 129

5.3.1 Admin Test Case 129

5.3.2 User/Guest Test Case 148

5.4 Check lists 165

5.4.1 Checklist of Aesthetic Conditions 165

5.4.2 Checklist of Authorization 165

5.4.3 Checklist of Validation 166

5.4.4 Checklist of Data Field Validation 166

5.4.5 Checklist of Submission 167

5.4.6 Test Results 168

5.4.7 Incident Report 168

5.5 Appendix B: Supporting Information 168

5.5.1 List of Tables 168

5.5.2 Reference 168

6 Software User’s Manual 169

6.1 Installation Guide 169

6.1.1 Setting up the environment at server side 169

6.1.2 Deployment at server side 169

6.2 User‘s Manual 170

6.2.1 Admin’s Guide 170

6.2.2 User’s Guide 179