



School of Information Technology
Diploma in Business Informatics

ITP281

E-Business & Project

Project Guide Book
2018 Semester 1

Version 1.0

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1. INTRODUCTION

This guide book will provide you with the essential and useful information in working on your project.

1.1. Module Aims

This module aims to expose students to developing real world e-business application systems in various business domains and strengthen their web application development skills by applying their knowledge to the project.

1.2. Module Objectives

Upon successful completion of this module, the students will be able to:

- Develop e-business application system based on real world requirements
- Understand project and technical issues related to implementing online e-business application systems

1.3. Supervisors

Module Group	Supervisor	Email	Phone
ITP281-01	Ms Jasmine Ng	Jasmine_Ng@nyp.edu.sg	6550-1763
ITP281-02	Ms Eunice Ang	Eunice_Ang@nyp.edu.sg	6550-1703
ITP281-03	Mr Ong Teck Kiat	Ong_Teck_Kiat@nyp.edu.sg	6550-1638
ITP281-04	Mr Chan Yuen Loong	Chan_Yuen_Loong@nyp.edu.sg	6550-1690
ITP281-05	Ms Teo Miow Ting	Teo_Miow_Ting@nyp.edu.sg	6550-1722

2. PROJECT INFORMATION

2.1. Project Scope

Business Idea

Your project team is free to choose any business idea for this project, as long as the idea can be translated into an e-business application. However, if you aim to score well for your business idea, you should take care to ensure there is service innovation in your idea.

Technical Implementation

As a team, your e-business application should minimally include the following features/functions:

- A Microsoft Server-side .Net Web Application with database connection (MDF file) and client-side web technologies.
- A consistent look and feel across the entire application
- Adoption of basic User Interface (UI) design principles to enhance application usability and give your application a professional look (e.g. hyperlinks to sections/subsections)
- Some forms of online transaction processing (e.g. electronic payment, tracking of order) or business logic (e.g. upselling, cross selling)
- Some form of database access that incorporate CRUD transactions
- Basic information that are typically found on e-business applications (e.g. Company Profile, Contact Information, Frequently Asked Questions, Terms & Conditions)

To score well for your technical implementation, your team needs to incorporate some of the following features/functions:

- Appropriate use of client-side technologies to help improve user interaction (e.g. Exceptional on-screen interactivity through AJAX implementation)
- Mobile UI for your e-business application
- Consumption of Web Services
- Business logic that delivers service innovation
- Any other advance features/functions as advised by your supervisor

2.2. Project Approach

The project is organised into 4 key phases:

- Project Initiation
 - Form project team; adopt Design thinking process to identify good and bad web sites; understand project scope and expectation; clarify project requirements.
- Business Idea Generation
 - Research and brainstorm business ideas; craft business proposal report; present business proposal.
- Analysis & Design
 - Translate business requirements into system requirements; formulate architectural design, database schema design and screen flow design; confirm project scope.
- Build, Test & Deploy
 - Develop e-business application; test application (unit test, system integration test); create final report; present application.
 - Deploy the application into a Web Server (e.g. Microsoft IIS)

2.3. Project Timeline

Students are required to be present for the practical and tutorial lessons unless otherwise specified (e.g. Self- Directed Learning).

The project timeline is provided below.

Week	Activity	Assessment
Project Initiation		
1	<ul style="list-style-type: none"> - Attend project briefing by supervisor - Form project team and elect team leader - 	
Business Idea Generation		
1-3	<ul style="list-style-type: none"> - Start project ideas discussion - Apply Design thinking concepts - Generate E-business idea and refinement. - Apply Design process to identify what makes a good website. 	
4	<ul style="list-style-type: none"> - Present business proposal to supervisor 	Business Proposal Presentation (5%)*
5	<ul style="list-style-type: none"> - Submit business proposal report 	Business Proposal Report (5%)*
Analysis & Design		
5-12	<ul style="list-style-type: none"> - Design database schema and refinement - Design screen flow and screens and refinement - Show project management efforts to supervisor during lesson - Develop application - Show project management efforts to supervisor during lesson 	Week 8 Database Schema (5%)*
Build, Test & Deploy		
13	<ul style="list-style-type: none"> - Progress Check 1 - Demo workable prototype to supervisor - Gather feedback from supervisor and refine application. 	Individual Review 1 (10 %)
15	<ul style="list-style-type: none"> - Progress Check 2 - Demo workable prototype to supervisor - Gather feedback from supervisor and refine application 	Individual Review 2 (10 %)
16	<ul style="list-style-type: none"> - Perform integration test 	
17	<ul style="list-style-type: none"> - Present project to assessors - Submit final report / poster 	Final Presentation (20%)* Final Report (5%)*

* Refer to the Assessment section for more details on these assessment components.

2.4. Project Organisation

The students will form project teams comprising 4 or 5 students per team. The teams will be supervised by the supervisor assigned to the module group. Each project team is to elect a team leader.

- Role of Team Leader
 - Coordinate and assign work among team members.
 - Monitor and update project progress.
 - Liaise with the supervisor on matters such as team progress and booking of meeting venues (if necessary).

- Role of Team Members
 - Complete allocated tasks (Marks will be deducted for an individual if he/she needs to rely heavily on others to complete his/her tasks. This is to cultivate an independent mind set in team members).
 - Cooperate with rest of the team to analyse, design, develop and test the application.

- Role of Supervisor
 - Provide guidance and advice to all project teams during the contact hours every week (e.g. business idea generation and proposal writing, system design and development, project planning, project presentation).
 - Facilitate and monitor progress of project teams.

2.5. Project Planning and Control

2.5.1. Project Plan

Each team (led by the team leader) is required to distribute the workload evenly among members. Each team must produce a project plan with detailed task assignments that are clearly indicated. Students are strongly encouraged to use project planning software such as Microsoft Project.

2.5.2. Project Control

Milestones (e.g. business proposal presentation) serve as an important means to monitor the progress of a project and are usually tied to a set of deliverables. The project plan must be designed such that the project tasks and activities work towards the milestone deliverables.

There should be regular team meetings to monitor the progress of the project. Meeting minutes must be taken during these meetings. These meeting minutes not only serve as evidence of the team meetings, they also serve as a useful tool to record what were agreed during the meeting. They can come in handy when conflict arises.

2.5.3. Project Folder

Each team is required to maintain a project folder to keep the team's project working documents. This project folder must contain the following:

- Project Team Organization Form (Refer to Appendix A)
- Project Plan
- Meeting Minutes (Refer to Appendix B)
- Business Proposal Slides
- Business Proposal Report
- Final Presentation Poster
- Final Report
- Research Literature
- Any other useful documents

This project folder can be in hardcopy or softcopy.

3. ASSESSMENT

3.1. Assessment Components

The assessment component marks are awarded by the supervisor unless otherwise specified.

For students who demonstrate exemplary leadership, attitude, creativity and initiative, and/or deliver exceptional application features, they can be awarded up to 10 merit marks. Conversely, for students who have bad attitude, poor conduct and low attendance rate, and/or regularly fail to meet deadlines, they can be penalised up to 10 demerit marks.

Week	Assessment Component	Marks		
		Individual	Team	Total
Business Idea Generation				
4	Business Proposal Presentation	5	0	5
7	Business Proposal Report * Refer to Appendix C for guidelines	0	5	5
Analysis & Design				
8	Database Schema	0	5	5
Build, Test & Deploy				
13	Individual Review 1	10	0	10
15	Individual Review 2	10	0	10
17	Final Presentation (Poster & Demo) * Assessed by supervisor & independent marker	20	0	20
17	Final Report * Refer to Appendix C for guidelines	0	5	5
Total		45	15	60

3.2. Grades and the Expected Level of Achievement

Grade	Reports	Database Schema	Individual Ability
Very Good	<p>Demonstrate very good knowledge of the business idea and its service innovation aspect.</p> <p>Report is well written with clear, concise and logical presentation of relevant information.</p>	<p>Database is well normalized, each table has a reasonable primary key.</p> <p>Foreign key is implemented.</p> <p>Data fields are logically created for the project</p>	<p>Very motivated in leading project team and/or show initiative in leading other team members in the use of new tools or technology.</p> <p>Reliable to complete tasks within deadlines independently.</p>
Good	<p>Demonstrate somewhat good knowledge of the business idea and its service innovation aspect.</p> <p>Report is well written with clear and logical presentation of relevant information.</p>	<p>Database is well created, each table has a reasonable primary key.</p> <p>Foreign key is implemented.</p> <p>Necessary data fields are created.</p>	<p>Motivated in leading project team and/or show initiative in learning new tools or technology.</p> <p>Can complete tasks within deadlines independently.</p>
Average	<p>Demonstrate some knowledge of the business idea and its service innovation aspect.</p> <p>Report is not well written with clear and logical presentation. May include irrelevant content.</p>	<p>Every table has a primary key</p> <p>Necessary data fields are created</p>	<p>Can complete tasks within deadlines with helps from others.</p>
Poor	<p>Unclear business idea and its service innovation aspect.</p> <p>Report is badly written with irrelevant content.</p>	<p>Database is not properly created. Table does not have primary key, data fields are not logical.</p>	<p>Show no initiative in learning new tools or technology</p> <p>Fail to complete tasks within deadlines even with help from others.</p>

Grade	Final System	Presentation
Very Good	Enhanced application features and/or innovative use of Internet Technology are well implemented. All functions are well-integrated to support flow of operations	Speak clearly with confidence Able to capture audience attention with active participations. Able to response to all the questions with relevant and elaborated answers.
Good	Some enhanced application features/functions. All functions are well-integrated to support flow of operations	Speak clearly with confidence Have some interactions with participants. Able to response to all the questions
Average	Mostly basic application features/functions. Not much initiative in learning new tools or technology. All functions are housed within one application to support the basic CRUD operations	Speak clearly most of the time but lack of confidence in presentation. Able to response to some of the questions
Poor	Implement only basic application features/functions and fail to explain them. No or poorly integrated project	Unclear speech and not able to capture audience attention. Unable to response to any of the questions

4. REFERENCE MATERIALS

All student reference materials for this project module will be uploaded into the Blackboard system. You are advised to access the system regularly for the latest updates.

APPENDIX A – PROJECT TEAM ORGANISATION

Module : ITP281 E-Business & Project

Module Group: _____

Project Team No: _____

Project Team Name: _____

S/N	Name	Admin No	Contact Number
1	(Team Leader)		
2			
3			
4			
5			

Note

- (i) The team must comprise of 4 or 5 students.
- (ii) The team members must be from the same Module Group.
- (iii) The first team member in the list above will be the team leader.
- (iv) A copy of this form must be submitted to your supervisor.

APPENDIX B – MEETING MINUTES TEMPLATE

Team Members Present:

Team Members Absent:

Date / Time:

Work / activities completed since last meeting:

Activity	Action by

Work / activities outstanding:

Activity	Expected Date of Completion	Action by

Work planned till next report:

Activity	Expected Date of Completion	Action by

Issues:

APPENDIX C – GUIDELINES FOR REPORTS

Business Proposal Report

Your business proposal report shall contain the following sections:

- Cover Page (NYP name/logo, diploma name, module code and name, document title, module group, team number, team member names and admin numbers, supervisor name)
- Contents Page
- Executive Summary (contains the most important information and NOT more than 1 page)
- Company/Organisation Overview
- Product/Service Information
- Value Proposition (identified business problem/gap and derived benefits)
- Section on Service Innovation
- Summary
- Appendices

Your business proposal report shall NOT exceed 10 pages, excluding the cover page, contents page and appendices. Header and footer shall be included to show at least the project title, the section/chapter name and the page number. Each section/chapter shall begin on a new page with an appropriate heading. The name of the student who documents the section shall appear next to the section heading in brackets. The appendices shall contain relevant supporting information, such as business research and/or reference list of all materials/website consulted (in alphabetical order).

Final Report

Your final report shall contain the following sections:

- Cover Page [NYP name/logo, diploma name, module code and name, document title, module group, team number, team member names and admin numbers, supervisor name]
- Contents Page
- System Overview [*Note: You may reuse the same material from earlier deliverables*]
 - Business Function Overview [*Note: 1 page*]
 - Multi-Tier Architectural Design [*Note: 1 page*]
 - Database Schema [*Note: 1 page*]
- User Guide
 - Step-by-Step Guide [*Note: With screenshots and short instructions*]
- Personal Reflection
 - Team Dynamics [*Note: Share about your working relationship with the team*]
 - Achievements [*Note: Share about how you overcome the challenges you faced*]
 - Key Learning Points [*Note: Share your thoughts on the knowledge gained from this module: For example, “Are you inspired to start your own e-business, and why?” and “If you intend to start an e-business, what are the knowledge and skills gained in this module that would better prepare you?”*]
- Appendices

Your final report shall NOT exceed 50 pages, excluding the cover page, the contents page and the appendices. Header and footer shall be included to show at least the project title, the section/chapter name and the page number. Each section/chapter shall begin on a new page with an appropriate heading. The name of the student who documents the section shall appear next to the section heading in brackets.

APPENDIX D – SELF AND PEER EVALUATION

This evaluation is designed to assist in the equitable distribution of assessment for each student in the project teams. Please record your own evaluation of the level of contribution (from 1 to 10) for yourself as well as other team members. Please put down relevant comments and reasons for justification purposes.

This evaluation is to protect your interest against any unfairness and thus you DON'T HAVE TO DISCUSS with any of your team members. This evaluation is STRICTLY CONFIDENTIAL.

Module Group: _____ Project Team: _____

Supervisor Name: _____

Team Member Name	Level of Contribution (1 to 10, 10 being highest)	Comments / Reasons

Student Name: _____ Admin No: _____

Signature: _____ Date: _____