## Project Planning and Management

FdSc Computing:

CO599 Work-Related Project



#### **Overview**

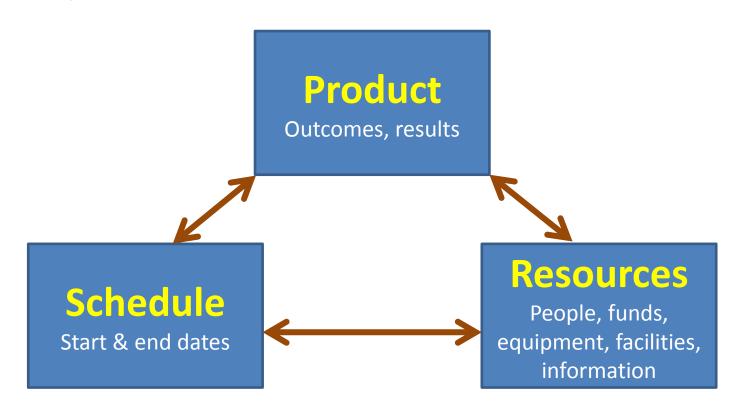
- Thinking about undertaking a project
- Key concepts about projects and project management
- Recall Year 1 content: Business Analysis (from User Experience)
- Different approaches for breaking down projects into stages
- Online course: Introduction to project management (Alison.com)

## What is a Project?

- An individual or collaborative enterprise that is carefully planned to achieve a particular aim (Anon 1, 2015)
- Large or small, a project always has the following ingredients (Portny, 2001):
  - Specific outcomes: Products or results
  - Definite start and end dates: dates when the work begins and finishes
  - Established budgets/resources: required people, funds, equipment, facilities, information

## Project Essentials (Portny, 2001)

- Inter-related, for example, expanding the expected outcomes may need more time and resources
- Less product = less resources? = less time?



## Projects May Be.... (Portny, 2001)

#### Large or small

- Install new subway system (\$1 billion, 15 years)
- Prepare a monthly report (takes you one day to do)

#### Involve many people or just you

- Providing training for 10,000 staff in a company
- Rearranging an office's furniture and equipment

#### Planned formally or informally

- Projects that are lined to an organisation's official and strategic planning
- Your boss instructs you during a conversation to do something

## Projects May Be.... (Portny, 2001)

- Tracked formally or informally
  - Careful record of hours and money spent
  - No formal records kept
- Performed for external or internal clients and customers
  - Repairing a piece of equipment that your company sold to a customer
  - Writing an article for your company's internal newsletter

## Projects May Be.... (Portny, 2001)

- Defined by a legal contract or an informal agreement
  - A signed contract between you and a customer requiring you to build a house to an agreed spec
  - An informal promise to help a colleague install some software on their computer
- Business related or personal
  - Conducting your organisation's employee satisfaction survey
  - Having a dinner party for 12 people in your home

## Motivation to do a Project

#### Business

- To solve a problem
- To change or improve something
- To take advantage of some opportunity

#### Student

 Because your course requires you to do a project in relation to required learning outcomes; to apply things that you have learned; to develop skills

#### Both of the above

Work related project as part of your course



# CO455 User Experience - Business Analysis



## Business Analysis and the Project Lifecycle

## What is Business Analysis?

• "Business analysis is the set of tasks and techniques used to work as a liaison among stakeholders in order to understand the structure, policies, and operations of an organisation, and to recommend solutions that enable the organisation to achieve its goals"

(Brennan, 2009)

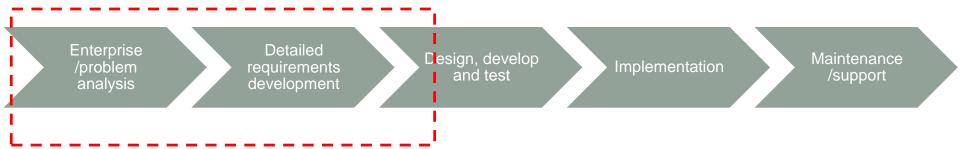
Enterprise /problem analysis

Detailed requirements development

Design, develop and test

Implementation

Maintenance /support



#### **BUSINESS ANALYSIS**

Enterprise /problem analysis

Detailed requirements development

Design, develop and test

Implementation /support

#### **Enterprise/problem analysis**

- Analyse the high-level needs/issues of the enterprise
- Evaluate potential business initiatives
- Envision potential future state



#### Detailed requirements development

- Elicit specific stakeholder wants and needs
- Document and prioritise stakeholder requirements

#### Design, develop and test

- Translate requirements into solution components
- Design solution
- Validate requirements (\*validation may be conducted at various points in the process)

Enterprise /problem analysis

Detailed requirements development

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#### **Implementation**

Implement solution

Enterprise /problem analysis

Detailed requirements development

Design, develop and test

Implementation

Maintenance /support

#### Maintenance/support

- Close project
- Provide ongoing solution support
- Warranty
- Knowledge transfer

## **Consider the Following Example**

Aim: To Develop a Website for Online Pizza Ordering



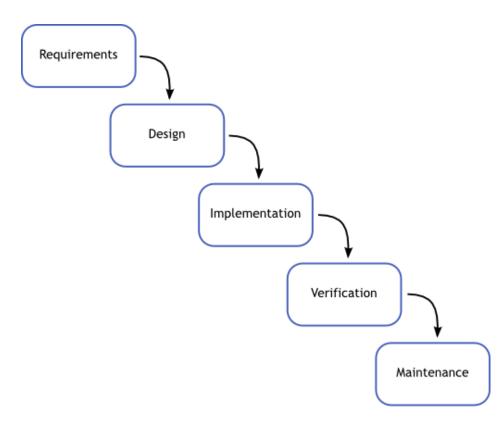
## **Aim Broken Down Into Objectives**

#### To Develop a Website for Online Pizza Ordering

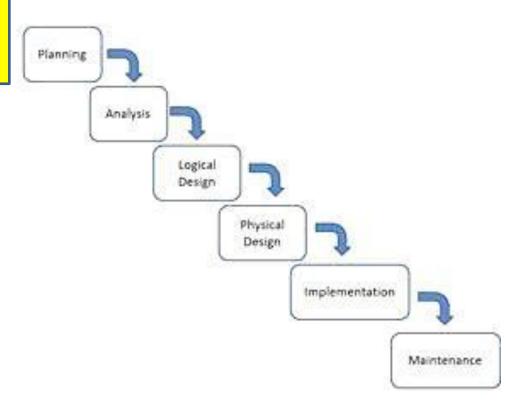
- Objective 1. Analysis of the business/problem.
- Objective 2. Elicitation of requirements.
- Objective 3. Background research (review of the available literature and practices elsewhere)
- Objective 4. Design the Website.
- Objective 5. Develop the Website.
- Objective 6. Test the Website.
- Objective 7. Evaluate the Website.

Project Life Cycle (Generic)

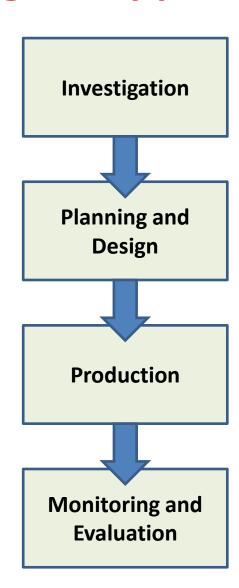
- Project Life Cycle (Generic)
- Waterfall methodology



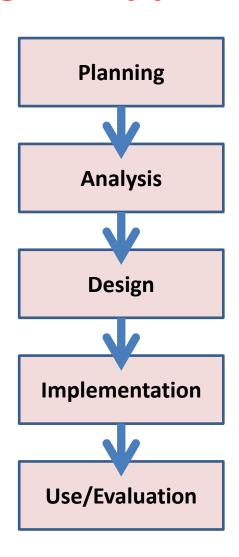
- Project Life Cycle (Generic)
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- Systems analysis and design



- Project Life Cycle (Generic)
- Waterfall methodology
- Systems analysis and design
- Project management



- Project Life Cycle (Generic)
- Waterfall methodology
- Systems analysis and design
- Project management
- System development life cycle



- Project Life Cycle (Generic)
- Waterfall methodology
- Systems analysis and design
- Project management
- System development life cycle
- PRINCE 2

Inter-related ideas – choose and use as appropriate

## A project management methodology

- Pre-project
- Project mandate
- Starting up a project
- Initiation stage
- Various delivery stages
- Closing a project

# Online Course Provides You With An Introduction To Project Management

## Alison.com



- Fundamentals of Project Management course
- 1. Project management overview
- 2. Project management methodology
- 3. Project management toolset
- 4. Project management documentation
- 5. System development life cycle
- 6. The planning phase
- 7. Project management, the analysis phase
- 8. The design phase
- 9. The implementation phase
- 10. Evaluation phase
- 11. Changing information systems
- 12. Project management assessment

### References

- Anon 1 (2015). Project [online]. Available from: <a href="http://en.wikipedia.org/wiki/Project">http://en.wikipedia.org/wiki/Project</a> [Accessed 01 February 2015].
- Brennan, K. (2009). A Guide to the Business Analysis Body of Knowledge. Toronto: International Institute of Business Analysis.
- Portny, S. (2001). *Project Management for Dummies.* Indiana: Wiley.