

Faculty of Design, Media & Management Department of Computing

Module Scheme

Module Title:	Business Modelling		
Module Code:	CO457	Academic Year:	2016 to 2017
Tutor(s):	Justin Luker and Hilary Mullen	Semester:	S2
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Learning Outcomes:

On successful completion of the module, the student will be able to:

- 1. Describe and contextualise different business processes and their inter-relationships
- 2. Demonstrate an understanding of business analysis and its important role in defining and implementing new systems
- 3. Explain and use different mapping and modelling techniques for examining existing processes and future innovations

Assessment Summary:

CW1: A written report containing five sections
(see CW1 assignment brief for details) on the
examination of the restaurant case study, where
business analysis and modelling techniques are
applied.

CW1 covers learning outcomes 1, 2 and 3. It is worth 40 percent of the module and the submission deadline will be set during module week 8 (please see the CW1 assignment brief for exact deadline date).

CW2: A written report containing five sections (see CW2 assignment brief for details) on the examination of the restaurant case study, where business analysis and modelling techniques are applied.

CW2 covers learning outcomes 1, 2 and 3. It is worth 60 percent of the module and the submission deadline will be set during module week 15 (please see the CW2 assignment brief for exact deadline date).

The Objectives for the class are to:

- Explain modelling and its role in business analysis
- Explain business modelling skills
- Be able to list the roles played in modelling the business
- Understand how to follow the steps in the modelling approach

The Business Models reviewed in this class will be:

- Module Week 1:
- The Stakeholder List
- Employee Descriptions
- The Inventory List

The CW1 Task to work on during the class will be:

• 1. Employee Table for the Restaurant

Create an employee table that documents the following information: the employees job title; a description of their role; the department they primarily work in (Bar; Dining; Kitchen; Back Office) the items of equipment that they primarily use within their role; the title of the line manager they report to.

The Objectives for the class are to:

- Understand how to relate projects, deliverables, and models
- Be able to classify business models
- Be able to use a modelling tool
- Understand how to identify the models in enterprise and business architectures

The Business Models reviewed in this class will be:

- The Business Scope and Levels of Detail
- Sequence Flow
- Business Requirements

The CW1 Task to work on during the class will be:

• 2. Organisation Chart for the Restaurant

Alongside the employee table, you need to also create an organisation chart for the restaurant as a whole. The organisation chart will be presented in a hierarchical layout that clearly shows the reporting structure used with the restaurant. The boxes will all be the same size with connecting lines aligned horizontally or vertically. The text inside the boxes will show the employee role.

Module Week 2:

The Objectives for the class are to:

- Be able to organise a requirements workshop
- Be able to describe the purpose and outcome of a requirements workshop
- Be able to list the rules of conduct for a requirements workshop

The Business Models reviewed in this class will be:

- The Business and Enterprise Architectures
- Organisational Structures
- The Functional View
- The Requirements Workshop

The CW1 Task to work on during the class will be:

• 3. Activities Table with Transactions

Create a table of appropriate activities that take place within the restaurant departments (Bar; Dining; Kitchen; Back Office). Also, document the transactions that take place between those departments during each activity, within the same table.

The Objectives for the class are to:

- Be able to model business functionality with use cases
- Understand how to perform a functional decomposition of a business

The Business Models reviewed in this class will be:

- Functional Decomposition
- Use-Case Models: Brief

The CW1 Task to work on during the class will be:

• 4. Eight Sequence Flow Diagrams, Two for each Restaurant Department

Create sequence flow diagrams for your activities table, for each of the restaurant's departments (Bar; Dining; Kitchen; Back Office). You will create **two sequence flow diagrams per restaurant department**, but you can choose which activities you create them for.

Module

Week 4:

Module

Week 3:

The Objectives for the class are to:

- Be able to create use-case models of business functionality
- Understand how to identify and name actors and use cases
- Be able to draw a use-case diagram

Module Week 5:

The Business Models reviewed in this class will be:

Use-Case Models: Casual and Fully Dressed

The CW1 Task to work on during the class will be:

• 5. Functional and Non-Functional Requirements for Restaurant Departments

Create a table showing the functional and non-functional requirements of the case study project for each department within the restaurant (Bar; Dining; Kitchen; Back Office)

The Objectives for the class are to:

- Understand how to document use cases
- Be able to list the sections in a fully dressed use-case description
- Be able to use BPMN to design business processes
- Understand how to capture use-case scenarios on a process diagram

Module Week 6:

The Business Models reviewed in this class will be:

- Use-Case Models: Refined
- Performance Requirements
- Business Process Models

The CW1 Task to work on during the class will be:

 The CW1 Tasks should be almost complete, so this week can be used for finishing off and refining them.

The Objectives for the class are to:

- Be able to diagram sequences of activities and events
- Be able to use gateways to describe decisions
- Understand how to divide a process across swim lanes
- Be able to Complete diagrams with groups, data objects, and annotations

Module Week 7:

The Business Models reviewed in this class will be:

- Process Flow and Connecting Objects
- Sequence Flows
- Activities and Other Events
- Tokens

The CW1 Task to work on during the class will be:

 The CW1 Tasks should be almost complete, so this week can be used for finishing off and refining them.

CW1 Assignment Deadline by 14:00 Tuesday 14th March 2017

The Objectives for the class are to:

- Be able to use business rules to document requirements
- Understand and interpret the entries in a decision table
- Be able to produce a detailed domain model for a business

Module Week 8:

The Business Models reviewed in this class will be:

- Swim Lanes and Artefacts
- Workflow Modelling using Swim Lanes

The CW2 Task to work on during the class will be:

• 1. Mission Statement and Vision Statement for the Restaurant
Create a mission statement for the restaurant before the start of the project,
then create a vision statement for the restaurant, as it will hopefully be after
the project has concluded.

The Objectives for the class are to:

- Understand how to model the structure of a business
- Be able to analyse a business domain using a UML class diagram
- Be able to document business terms in the business glossary

The Business Models reviewed in this class will be:

Module Week 9:

- Swim Lanes and Artefacts
- Workflow Modelling using Swim Lanes
- Documenting Business Processes
- Business Rules and Decision Tables
- Business Domain Models

The CW2 Task to work on during the class will be:

• 2. Business Strategies and Goals for the Restaurant
Create a table to document the strategies and goals that could be employed to move the restaurant from the position represented in your mission statement to that reflected in your vision statement

Module

Week 10:

The Objectives for the class are to:

- Be able to describe the attributes for business objects
- Be able to capture the relationships between business objects
- Be able finalise a business model

The Business Models reviewed in this class will be:

- Business Domain Objects and Relationships
- Associations and Generalisations
- The Business Glossarv
- Attributes
- Association Multiplicity

The CW2 Task to work on during the class will be:

3. A Functional Diagram for each Restaurant Department Create a functional diagram for each of the restaurant's departments (Bar; Dining; Kitchen; Back Office).

EASTER VACATION FOR THREE WEEKS

The Objectives for the class are to:

- Be able to model time
- Be able to use matrices
- Be able to describe business interfaces

The Business Models reviewed in this class will be:

- Finalising the Business Model
- Timing
- Matrices
- Business Interfaces

Module

The CW2 Task to work on during the class will be:

4. Eight Fully Dressed Use Case Diagrams, two for each Restaurant **Department**

Create fully dressed use case diagrams for two of the functions presented within your functional diagrams for each restaurant department (Bar; Dining; Kitchen; Back Office).

Remember you are being asked to create fully dressed use case diagrams here, so you will be expected to include scenario tables containing both main flow descriptions and alternate flows with branching, beneath each of your use case diagrams.

Week 11:

Week by Week Guide: The Objectives for the class are to: Be able to analyse motivation • Be able to specify supplementary (non-functional) requirements • Be able to assign priorities The Business Models reviewed in this class will be: Motivation Means and Ends Module Business Rules and Policies Week 12: Supplementary Requirements Quality-of-Service Requirements The CW2 Task to work on during the class will be: • 5. Eight Sets of Business Rules, Two for each Restaurant Department Create a set of business rules for each of the departments within the restaurant (Bar; Dining; Kitchen; Back Office). You will create two sets of business rules per restaurant department, but you can choose which activities you create them for. The Objectives for the class are to: • Be able to deliver user requirements produced from business models • Be able to define the level of detail required by stakeholders The Business Models reviewed in this class will be: Module Prioritisation Week 13: Stakeholder Views The CW1 Task to work on during the class will be: The CW1 Tasks should be almost complete, so this week can be used for finishing off and refining them. The Objectives for the class are to: • Be able to transform business models into user requirements Be able to describe user interfaces. • Be able to plan a requirements presentation Module The Business Models reviewed in this class will be: Week 14: • Business Process System Constraints

The CW1 Task to work on during the class will be:

The CW1 Tasks should be almost complete, so this week can be used for finishing off and refining them.

Module Week 15:

CW2 Assignment Deadline.

No Taught Class, Hand In of Final Assignment Work ONLY