

# IAB 207 Rapid Web Development

## Assessment Task 1

### Task overview

Assessment name:	Web Application Design: Event Management System
Task description:	<p>In this assignment, you will design an Event Management System as a web application. The genre of events is your own choice, (e.g. Seminar, Music, Business, etc.) and you will scope the design for your application. So, be creative.</p> <p>What is an Event Management System? It is an application that will allow users to post events of a given type, book tickets for events, comment on those events – take a look at <a href="#">Eventbrite Australia</a> (however, <b>we recommend that your design has a single focus/genre</b>)</p>
Learning outcomes measured:	<p>ULO#1. Analyse client requirements and design a web application in preparation for the software development process.</p> <p>ULO#2. Apply existing frameworks to implement model, view, and controller aspects of web applications</p> <p>ULO#4. Evaluate the use of web applications in relation to different computer systems (hardware, software, and networks).</p>
Due:	11.59pm Mo 29/8/22
Length:	This written report would typically only be a few pages in length.
Weighting:	25 %
Individual/Group:	Individual
How will I be assessed:	7-point grading scale using a rubric

### Task details

What you need to do:	<ol style="list-style-type: none"><li>1. Read the Criterion-Referenced Assessment Rubric.</li><li>2. Read the assignment objectives, assignment description, late submission penalties, and background.</li><li>3. Follow the step-by-step guide of the assignment.</li></ol>
Presentation requirements:	<p>This assessment task must be formatted in the following way:</p> <ul style="list-style-type: none"><li>• 12 point font</li><li>• Single line spacing</li><li>• Use APA referencing (if required).</li></ul>
Resources needed to complete task:	<ul style="list-style-type: none"><li>• IAB 207 Blackboard site</li><li>• <a href="#">QUT Cite Write APA guide</a>.</li></ul>

## Submission Information

What you need to submit:	A Web Application Design Report as detailed below.
Moderation:	All staff who are assessing your work meet to discuss and compare their judgements before marks or grades are finalised.

### Academic Integrity

As a student of the QUT academic community, you are asked to work to uphold the principles of academic integrity during your course of study. QUT sets expectations and responsibilities of students, more specifically it states that students “adopt an ethical approach to academic work and assessment in accordance with this policy and the Student Code of Conduct. E/2.1 (MOPP C/5.3 Academic Integrity).

At university, students are expected to demonstrate their own understanding and thinking using the ideas provided by ‘others’ to support and inform their work, always making due acknowledgement to the source. While we encourage peer learning, it is not appropriate to share assignments with other students unless your assessment piece has been stated as being a group assignment. If you do share your assignment with another student, and they copy part of or all of your assignment for their submission, this is considered collusion and you may also be reported for academic misconduct. If you are unsure and need further information you can find this at: [http://www.mopp.qut.edu.au/C/C\\_05\\_03.jsp#C\\_05\\_03.03.mdoc](http://www.mopp.qut.edu.au/C/C_05_03.jsp#C_05_03.03.mdoc).

### Overview

Web app development is complex. In fact, it involves so many different tasks that it is highly unlikely that a single person can carry out each of them on a professional level. Ordinarily, a web development project is made up of a team of specialists who are experts in their own field. So, is this unit attempting to achieve the impossible? No. Whilst it is inevitable that you will not gain the skills to develop a professional application by yourself, you will learn enough to understand each of the key areas involved and be able to produce a small prototype application. This understanding across all the relevant areas will be extremely useful to you, especially if working in a multidisciplinary team in industry.

In this individual assignment, you will:

1. Describe the type of event management application you want to design and develop (e.g. event management web application for seminars, food festivals, or music events etc.)
2. Design the details of your web application (user stories, conceptual model, data model, web-page wireframes).

The Event Management Web application must support a specific list of requirements so please keep these in mind when you come up with your design.

### Project requirements

#### 1. User Registration

- a. The site has one type of user. This user can see all events, comment on all events, but only edit/update their own events.

- b. A name, email-id, password and contact number should be obtained when registering with the system.

## **2. Creating an event**

- a. A logged in user can create an event. Since your web application is specific to an event type, the user should provide relevant information when creating an event. For example: The user will enter the artist names, the type of musical, the venue, date, and time for a Musical event. In addition, the user should be able to enter the number of tickets available for the event.
- b. An event can have one of the following status: Open, Inactive, Sold Out, or Cancelled.
- c. The creator of an event (and only the creator) should be able to update the details of the event. For example, if an event gets cancelled, the creator should be able to update the event details.

## **3. Viewing Events**

- a. Anybody can view all events (e.g. visitors who are not logged in).
- b. The events can be grouped into different categories (e.g., Jazz, Country, Classical, etc. for Music-related events). A user should be able to view all upcoming open events belonging to a category.
- c. Any user should be able to select an event and view the details of it.

## **4. Buy a ticket for an event, post or read Comments**

- a. A user can view the details of the event and book tickets for the event. To buy the tickets, the user should be logged in. The user should provide details such as the quantity of the tickets to be booked. An order is generated by the application, and the order detail (order id) is provided to the user for reference.
- b. If the user buys tickets equal to the tickets available, the event will be labeled as "Sold Out".
- c. If the user enters a number of tickets that exceeds the tickets available, the application should inform the user that the order cannot be placed.
- d. Any user can post a comment on the event and provide details if they are logged in. The user, the comment, and the date the comment was posted can be seen by all users.
- e. Anybody can view the comments posted by other users on the event.

## **Web Application Design Report**

You should submit a PDF (filename: studentid\_ass1.pdf) document containing the following.

**Description of site:** A paragraph (6-8 lines) about the Event management Website. Include the type of event, the important details of the event need to be described.

**Description of technology context (i.e. platform):** Half to one page. What are the advantages and disadvantages of this functionality being implemented as

- a web application?
- a mobile application?
- a desktop application?

How do these platforms compare considering your specific situation? Are there any other platforms that could be used? Apply referencing.

**User stories:** Prepare user stories for the requirements. A user story can detail a requirement (or part of a requirement). A user story should follow the format given in the tutorial and lecture notes exactly. Typically 8-12 user stories might be sufficient for your assignment. However, this is not prescriptive and depends on your design. Please see class examples.

**Conceptual Model:** With the user story as a reference, identify the objects, their behaviour, relationships and multiplicity. Use a UML class diagram to describe the final conceptual model containing concepts, their attributes, the relationships, and the responsibilities. You can use any open source UML editor for this purpose (e.g. <https://www.lucidchart.com/> ). In your report, do present the steps to arriving at the conceptual model – i) provide a list of concepts/classes that were identified from user stories, ii) the refined list of classes, iii) the list of responsibilities of class identified from user stories, and the final conceptual UML model .

**Data Model:** Design the data model using UML identifying primary keys, classes, associations, multiplicity. You could also use lucidchart for this model.

**Wireframes:** Provide wireframes for the following:

1. Landing/index page of the Web application.
2. A page that allows a logged in user to create an event.
3. Page for booking tickets of an event.
4. The page that allows a buyer to view the details of the event.

– You can do this with pen-paper so long as you provide images or by using a mock-up application that you are familiar with (such as PowerPoint, lucidchart, Sketch (Mac) or Lunacy (PC) etc.)

### **How you will be marked**

Please see the criteria assessment rubric.

### **Late Submission Penalties**

Consistent with QUT commitment to real world learning, managing priorities, competing commitments and time are essential skills for effective learning and professional life. Assessment work submitted after the due date will be marked only with an approved extension (MOPP E/6.8.2). Assessment work submitted after the due date without an approved extension or, where an extension has been granted, after the extended due date, will not be marked and a grade of 1 or 0% will be awarded against the assessment item.

## IAB 207 Rapid Web Development Assessment Task 1 Rubric

Criteria	High Distinction	Distinction	Credit	Pass	Fail
<b>Describing the site.</b> The Ability to describe the site, conveying the important details, including user stories based upon the requirements.  Weighting: 5/25	Excellent description of the site. Complete set of user stories addressing all requirements. Each user story has all elements and are understandable to everyone clearly expressing the user needs and benefits. Acceptance criteria is extremely well described.	Very good description of the site. Complete set of user stories addressing all major requirements. Each user story has all elements and are understandable to everyone clearly expressing the user needs and benefits. Acceptance criteria is very well described.	Good description of the site. Complete set of user stories addressing most key requirements. User story might miss some elements but still articulate user needs and benefits. Acceptance criteria is well described.	Adequate description of the e-commerce store. User stories addressing key requirements but some may be missing. User story might not be fully complete or understandable to everyone or missing some of the user needs and benefits. Acceptance criteria is sufficiently described.	Inadequate description of the e-commerce store. User stories miss key requirements or are not complete or understandable. User needs and benefits need more exploration and acceptance criteria insufficient for the site.
<b>Description of technology context:</b> What are the advantages and disadvantages of this functionality being implemented as a web, mobile, desktop application? How do these platforms compare and what other technology approaches exist?  Weighting: 4/25	In-depth evaluation and comparison of technology approaches. The difference between a web, mobile, desktop implementation is explained in detail demonstrating significant insight. The discussion considers hardware, software, and network differences and their consequences including with respect to user experience as per your specific design. Other technology approaches also considered. Claims are well referenced.	In-depth evaluation and comparison of technology approaches. The difference between a web, mobile, desktop application implementation is explained in detail. The discussion considers key differences and their consequences including with respect to user experience. Claims are adequately referenced.	A good evaluation and comparison of technology approach. The difference between a web, mobile, desktop application implementation are explained in reasonable detail. The discussion considers some differences and their consequences. Claims are adequately referenced.	A reasonable evaluation and comparison of technology approaches. The difference between a web application and at least one other relevant approach is explained. The discussion considers some differences and their consequences but lacks detail or may have errors. References included support some claims.	Evaluation and comparison of technology approaches if of limited use. The discussion considers some differences and their consequences but lacks detail or has have errors.
<b>Conceptual model.</b> The ability to represent the objects and their behaviour, attributes, relationships and multiplicity extracted from the user stories using a UML class diagram.  Weighting: 8/25	All classes have been detailed with a complete set of attributes. Behaviours of classes are complete. Relationships between all classes are correct and multiplicity has been specified.	All classes have been detailed with a complete set of attributes. Some behaviours or attributes are missing. Relationships, multiplicity are correctly specified.	All classes have been detailed. Some behaviours or attributes are missing. Relationships, multiplicity is specified.	All classes identified. Attributes and behaviours are incorrectly specified. Relationships are missing or multiplicity is incorrect.	Some classes are missing or incorrect. Attributes and behaviours are incorrectly specified. Relationships are missing or multiplicity is incorrect.
<b>Database model.</b> Ability to represent the data model including classes, associations, multiplicity and represent using UML.  Weighting: 3/25	All classes have been detailed with a complete set of attributes. Primary and Foreign key are correctly specified. Associations between all classes are correct and multiplicity has been specified.	All classes have been detailed. Some minor attributes are missing. Primary key and Foreign key are correctly specified. Associations, multiplicity are correctly specified.	All classes have been detailed. Some attributes are missing. Primary key and Foreign key are correctly specified. Associations, multiplicity are correctly specified.	Some classes are missing. Some Primary key, Foreign Key and attributes or associations are missing. Multiplicity has been specified.	Some classes are missing or incorrect. Attributes and Keys are incorrectly specified. Associations are missing and multiplicity is incorrect.
<b>Wireframes.</b> The ability to depict a suitable user interface for the site.  Weighting: 5/25	The site is a convincing, sophisticated depiction of a working system. The site has an extremely appropriate structure and is extremely consistent with the user stories. The content is extremely relevant and navigation and searching is intuitive.	The site is a quite convincing depiction of a working system. The site has a very appropriate structure and is very consistent with the user stories. The content is very relevant and navigation and searching is extremely well thought out.	The site is a good depiction of a working system. The site has appropriate structure and styling which is consistent with the user stories. The content is relevant and navigation and searching is well thought out.	The site adequately depicts a working system. The site has mostly appropriate structure which is mostly consistent with the user stories. Content relevance, navigation, and searching needs some improvement.	The site is not an adequate depiction of the system.. The site structure and consistency needs significant improvement. The content or functionality is not always relevant and the presentation is substantially lacking.

## Document Revision

Date	Version #	Changes
1/8/22	1.0	First draft.
9/8/22	1.1	Minor changes: <ul style="list-style-type: none"><li>• Updated advice on user stories to: "Typically 8-12 user stories might be sufficient for your assignment. However, this is not prescriptive and depends on your design. Please see class examples." We received feedback that representation with 6-8 would be too challenging for fulfilling all user requirements.</li><li>• Replaced word "booked" with "sold out" in requirements 2b and 4b and "upcoming" with "open" in requirements in 2b and 3b to make event status clearer.</li><li>• Updated "Description of Technology Context" CRA and performance levels to be more specific about comparing web, mobile, desktop implementations. Previously said "web and two other".</li></ul>