

Assignment Name	A01: Term Assignment
Goal of the assignment	To specify, design, develop, test and deploy a functional data driven WEB application
Assignment Grade Value	100% of this assignment = 55% of module grade
COVID-19	<ul style="list-style-type: none"> • An <u>MVC framework</u> template is now provided which implements user registration and login processes and supports two types of user – ADMINISTRATOR and CUSTOMER • All students are welcome to utilise this MVC framework as a starting point to build your chosen application. • Alternative MVC open source frameworks may also be used eg Codeigniter but code must be developed and delivered as a Netbeans project. • Face to face demonstrations will not be possible – however students are required to attend an online TEAMS demonstration as a major deliverable at the end of the project – see dates below.
Requirements	<p>Students may choose their own SUBSTANTIAL web application idea for this assignment. Applications must be written in PHP using a MVC design pattern. Refer to example ideas accompanying this assignment sheet.</p> <p>The following features (as a minimum) must be implemented in the chosen application.</p> <p><u>Database:</u></p> <p>A database is provided containing a USER table as part of the MVC framework application. You will need to add your own tables to build a functional application.</p> <p>Data is to be stored in a fully normalised database implemented in MySQL or MS SQL Server</p> <p>Stored procedures should be utilised where appropriate.</p> <p>Security - encryption should be used to protect all sensitive user data (such as passwords).</p> <p><u>Client Application Features:</u></p>

	<p>The application must support at least two types of registered user –eg: ADMINISTRATOR and a CUSTOMER - who will be able to access different areas of application functionality when logged on.</p> <p>The application must implement security features to prevent unauthorized viewing of restricted pages and/or functions based on logon credentials. (this is already done for you in the MVC framework template)</p> <p>All user data entry fields should be validated before executing SQL updates or inserts to database tables.</p> <p>Error/exception handling must be used for all application program to database interactions.</p>
<i>Deliverables</i>	<p>The design of the application must be fully documented. Each document/deliverable must be available for assessment:</p> <p>Deliverable 01 (5%) : An MS WORD document providing an outline description of the proposed application. See Deliverable 01 Template information on Moodle.:</p> <p>Deliverable 02 (15%) : Initial Specification and Design – an MS WORD document containing details of the project design. See Deliverable 02 Template information on Moodle.:</p> <p>Deliverable 3 (10%): Initial Coding Design/Demonstration and final Word Document –</p> <ul style="list-style-type: none"> • Word Document See Deliverable 03 Template information on Moodle.: • ZIP file containing the NETBEANS project with a database folder containing a backup of your database. • Demonstration - You will be required to demonstrate your code during regular class time – see schedule below. <p>Deliverable 4 (25%): Final Project Deliverable/Demonstration</p> <ul style="list-style-type: none"> • An updated MS WORD Document (not zipped)- See Deliverable 03 Template information on Moodle. • A .zip file containing the complete PHP code/Java NETBEANS Project of the application.

	<ul style="list-style-type: none"> • A backup .sql file (not zipped) for the database implemented in the application. The database must include all relevant test data. • Demonstration - You <u>WILL</u> be required to explain your application by TEAMS Call - see schedule below- Failure to be available to demonstrate will result in significantly reduced overall grade.
<i>Schedule</i>	<p>Moodle Upload Schedule</p> <ul style="list-style-type: none"> • Deliverable 1: Sun 31 January 2021 11pm • Deliverable 2: Sun 14 February 2021 11pm • Deliverable 3: Tue 23 March 2021 11pm • Deliverable 4: Tue 27 April 2021 11pm <p>Demonstration Schedule (TEAMS)</p> <ul style="list-style-type: none"> • Deliverable 3 Demo: During Regular class times <ul style="list-style-type: none"> ○ Grp A: Weds 24th March 2021 ○ Grp B: Thurs 25th March 2021 • Deliverable 4 Demo: During Regular class times <ul style="list-style-type: none"> ○ Grp A: Weds 5th May 2021 ○ Grp B: Thurs 6th May 2021