|  |  |
| --- | --- |
| Assessment Title | Test |

|  |  |
| --- | --- |
| Competency Details | |
| Unit code/s and title/s | ICTPRG547 Apply advanced programming skills in another language |
| Qualification code/s and title/s | ICT50120 Diploma of Information Technology (Advanced Programming) |
| Business unit/Work group | Business and Arts/ IT Studies |

|  |  |
| --- | --- |
| Complete for eachstudent | |
| Student Details | |
| Student name |  |
| Student SIS ID |  |
| Assessment date |  |
| Reassessment | This is a re-attempt |

|  |
| --- |
| Guidelines |
| Ensure you have read the Student Assessment Instructions related to this assessment task before completing the task described in the Task Details section below.  The task details are provided for you to use during the assessment. This document must be returned to your assessor at the end of the assessment. You are not permitted to keep this document or make a copy. |

**ITWorks** has hired you as an analyst/developer to develop, test and deploy a prototype ASP.NET MVC application for one of their client Acme Publishers. The database administrator has completed the database for this application called PUBS.mdf which you are required to use in this application.

**Technical Specifications and Requirements**

The system analyst designers have come up with the following technical specifications which you must adhere to. You will need to refer to the MVC documentation on MSDN using following URL: <http://msdn.microsoft.com/en-us/library/dd394709.aspx> to select the most appropriate APIs

1. Use ASP.NET Entity Framework to connect your MVC app to the data must be database driven web-based system that connects to the PUBS.mdf database, and the system architects have recommended the use of the ASP.NET MVC framework with Entity Framework
2. All database interactions must take place through an Entity Framework Model
3. All code implemented here must adhere to the IT Works coding standards for C#.NET
4. Your code must contain relevant comments to explain parts of the code which will also serve as part of the applications documentation. Use Visual Studio Tools to generate relevant blocks of code comments
5. You will need to use the following tables in the PUBS database as shown below but only need to create the Controllers for Publishers and Title.

[Diagram

Description automatically generated](file:///C:\Users\dalevanh\OneDrive\Tafe\TAFE%20MAPPINGS\5ACW\ASSESSMENT%201\ER)

1. Your team must implement the following Use Cases (see model below in Fig 1) using the required Action methods and typed Views



**Fig 1 – Use Case Model**

**1. Display Publishers living in USA (**See Fig 2 below)

Use the Publishers Controller Index Action method and Viewto display the details of all *Publishers who live in the USA*.

The following details of the Publishers should be displayed:

Publisher ID

Publisher Name

Country

Number of Titles published.

This page should also link to Edit and View more the Details of each Publisher.

The page should also display a link to Create Newa new Publisher.

Table

Description automatically generated

**Fig 2**

**2. Display a Publishers details and associated Titles** (See Fig 3 below)

Use the Publishers Controller Details Action method and View to display the following information for each Publisher

Publisher ID

Publisher Name

City

State

Country

The page must also display all the Titles associated with the displayed Publisher.

For each Title the following information to is displayed:

Title ID

Title

Type

Price

YTD Sales

Published Date

Each Title row should have links to Edit and Display Details which will enable the user

to Edit a Title and to view more Details about each Title.

At the bottom of this page there should be a link to Add a New Title to the list of Titles

for the displayed Publisher.

Text

Description automatically generated

**Fig 3**

**3. Create a New Publisher** (See Fig 4 below)

Use the Publishers Controller two Add Action methods appropriately and the Add View to add a new Publisher.

The **Add New Publisher** View should consists of the following Textbox fields:

Publisher ID (This is not an auto generated number)

Publisher Name

City

State

Country (must be USA)

Once a new Publisher is added to the database, the Index page (View) is displayed showing the new Publisher record is now visible. (**NOTE new pub ids must start with 99**)

Graphical user interface, text, application

Description automatically generated

**Fig 4**

**4. Edit a Publisher** (see Fig 5 below)

Use the Publishers Controller two Edit Action methods appropriately and Edit View to edit a publisher.

The **Edit Publisher** View will display the following Publisher Editable fields:

Publisher ID (Shown but NOT editable)

Publisher Name

City

State

Country

On clicking the Save button:

The Index page (View) is displayed, and the edited Publisher should be updated in the database and changes reflected in the Index page (View)

Graphical user interface

Description automatically generated with medium confidence

**Fig 5**

**5. Display Title Details** (see Fig 6 below)

Select a Publisher from the Index page and from the Publisher Details page select an associated Title that should navigate to the Title Details page (view) – Use the Title Controller and Details Action method and view

The **Title Details** View should display all the fields (columns) of a Title as shown in the Titles table.

Graphical user interface, application

Description automatically generated with medium confidence

**Fig 6**

**6. Edit a Title Details** (see Fig 7 below)

Navigate from a Publisher Details View to a Title Edit page

The **Edit Title** page should display the following fields:

Title ID (Shown but NOT editable)

Title

Type

Publisher ID

Price

YTD Sales

Published Date.

On clicking the Save button, The edited Title should be updated in the database, and the app navigates back to this Titles Details page that should display the changes made

Graphical user interface

Description automatically generated

**Fig 7**