Microsoft

Exam 70-354

Universal Windows Platform – App Architecture and UX/UI (beta)

Version: 7.0

[Total Questions: 76]

Topic break down

Topic	No. of Questions
Topic 1: Contoso, Ltd.	8
Topic 2: Fabrikam, inc.	9
Topic 3: Litware, Inc.	7
Topic 4: Mix Questions	52

Topic 1, Contoso, Ltd.

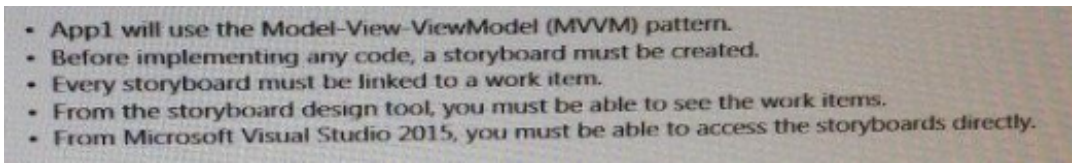
Overview

Contoso, Ltd. is an international computer manufacturer that has 3.000 employees.
Contoso plans to develop a Universal Windows Platform (UWP) app named App1 to manage the details of the computers sold by the company. App1 will display all of the available computer models on its main page.
Users will be able to select a computer model to see its details. On the details page for each computer, there will be a picture of the respective computer. The users will be able to use touch gestures to rotate the picture and to click a button to hear a description of the computer model.
Contoso also plans to develop a REST service to provide data to Appl. The data will be stored in a Microsoft SQL Server database.

Requirements

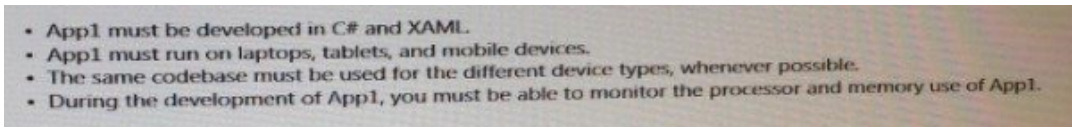
Conceptual Design Requirements

Contoso identifies the following conceptual design requirements tor App1:



Technical Requirements

Contoso identifies the following technical requirements for App1:



Data Model

The following class was developed to store information about the computers

```
class Computer
{
string model;
public string Model
{
      get
      {
            return model;
      }
      set
      {
            model = value;
      }
}
public override string ToString()
{
      return Model;
}
}
```

The data must be accessed only through the REST API, not by using a direct SQL Server connection.

Main Page Requirements

The main page file will be named MainPage.xaml. The following data context will be used for the main page.

```
class ContosoAppContext
{
List<Computer> computers = new List<Computer>()
{
      new Computer() { Model= "Model1" },
      new Computer() { Model = "Model2" }
};
public list<Computer> Computers
{
      get
      {
            return computers;
      }
      set
      {
            computers = value;
      }
}
}
```

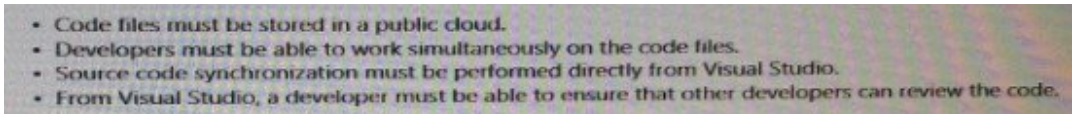
Details Page Requirements

The Details page will use the following media element.

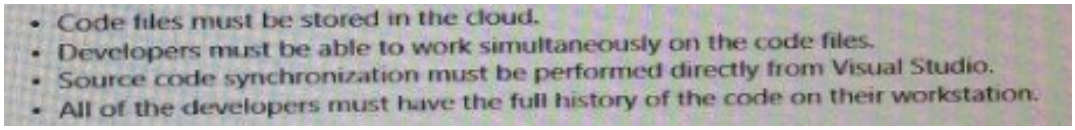
<MediaElement x:Name="media'7>

Development Requirements

Contoso identifies the following technical requirements for the development process of App1:

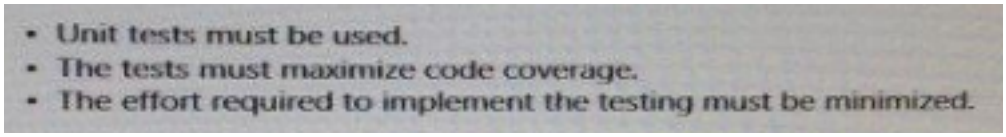


For the REST service. Contoso plans to outsource the development. Contoso identifies the following technical requirements:



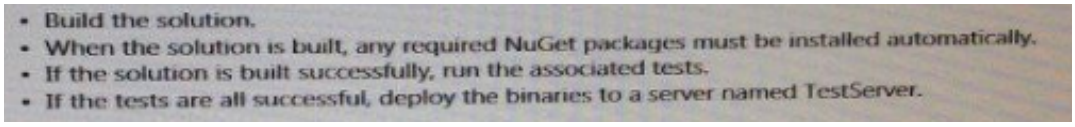
Tests Requirements

Contoso identifies the following requirements for testing:



Build Process

Contoso defines the following build process:



Question No : 1 - (Topic 1)

You need to ensure that each computer in MainPage.xaml is displayed with an associated picture. What should you use?

A. VisualStateManager
B. DataTemplate
C. AdaptiveTrigger
D. VisualState

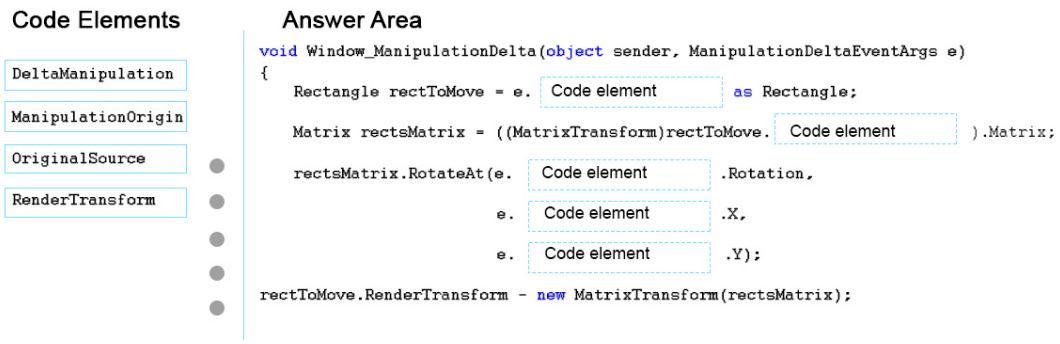
Answer: C

Question No : 2 DRAG DROP - (Topic 1)

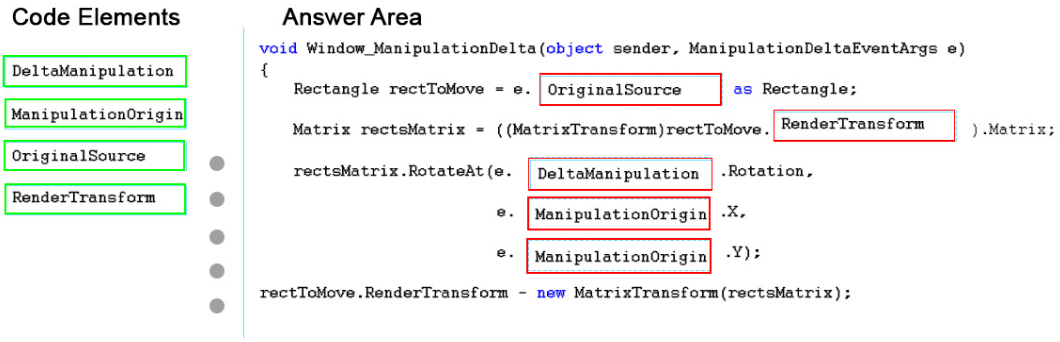
On the details page, you render the picture of the computer inside an object of the Rectangle type.

You need to implement the ability to rotate the rectangle that contains the picture.

How should you complete the code? To answer, drag the appropriate code elements to the correct targets. Each element may be used once, more than once, or not at all. You may need to drag the split bar between panes or scroll to view content.



Answer:



Question No : 3 - (Topic 1)

You need to recommend which repository must be used for the REST service.

What should you recommend?

A. Team Foundation version control with Visual Studio Online
B. Microsoft Azure virtual machines with Team Foundation version control
C. Microsoft Azure Blob storage
D. GitHub

Answer: A

Question No : 4 - (Topic 1)

You need to recommend which tool to use to create the storyboards.

What should you recommend?

A. Microsoft Visio
B. Microsoft PowerPoint
C. Microsoft Visual Studio
D. Microsoft Excel

Answer: B

Question No : 5 - (Topic 1)

You need to recommend a solution to monitor App1.

What should you include in the recommendation?

A. the Output window in Visual Studio
B. Windows Performance Monitor
C. Resource View in Visual Studio
D. Class View in Visual Studio

Answer: B

Question No : 6 - (Topic 1)

You need to recommend a source control solution for the development of Appl What should you recommend?

A. Microsoft Azure virtual machines with Team Foundation version control
B. GitHub
C. Team Foundation version control with Visual Studio Online
D. Microsoft Azure Blob storage

Answer: B

Question No : 7 - (Topic 1)

You need to recommend a solution to ensure that the UI adapts to different devices.

What is the best recommendation to achieve the goal? More than one answer choice may achieve the goal. Select the BEST answer.

A. Create a single project and use VisualState.
B. Create a project for the phones, a project for the tablets, and a project for the laptops.
C. Create a single project and use a responsive .ess file.
D. Create a single project and use the LESS CSS preprocessor.

Answer: A

Question No : 8 - (Topic 1)

You need to recommend a solution to meet the testing requirements. What should you include in the recommendation?

A. a web performance test
B. load testing
C. IntelliTrace
D. IntelltiTest

Answer: B

Topic 2, Fabrikam, inc.

OverView

A company named Fabrikam, Inc is hired to develop a Universal Windows Platform (UWP) app named CityPlaner. The app will provide city employees with the ability to plan and manage city operations. City operations include all operations that a municipality might administer, such as emergency services and city maintenance.
The Cityplanner app will be deployed to different devices. CityPlanner will use Microsoft Azure to store data.

Existing Environment

Development Environment

Each developer has a laptop that has the following configurations:
* Operating System : Windows 8.1 (x64) pro.
* Memory: 4GB of RAM.

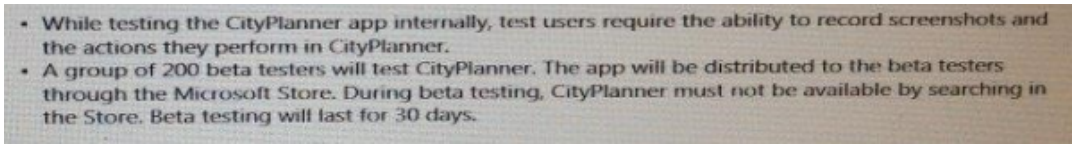
Each developer use a Hyper V virtual machine for debelopment. Each virtual machine has the following configurations:
* Development environment: Microsoft visual studio 2015 Express.
* Operating System: Windows 8.1 (x64) pro.
* Source control: Git

Visual Studio Online will be used for application lifecycle management.
The City maintains its own NuGet repository library to help share and distribute code.

Application on Testing

You have the following test environment:
* A machine group named Test Machines is configured. Three virtual machines for testing are provisioned in Azure and added ro the group.
* Windows PowerShell is added to all of the testing virtual machines.

You identify the following requirements for testing:


- While testing the CityPlanner app internally, test users require the ability to record screenshots and the actions they perform in CityPlanner.
- A group of 200 beta testers will test CityPlanner. The app will be distributed to the beta testers through the Microsoft Store. During beta testing, CityPlanner must not be available by searching in the Store. Beta testing will last for 30 days.

Technical Background:

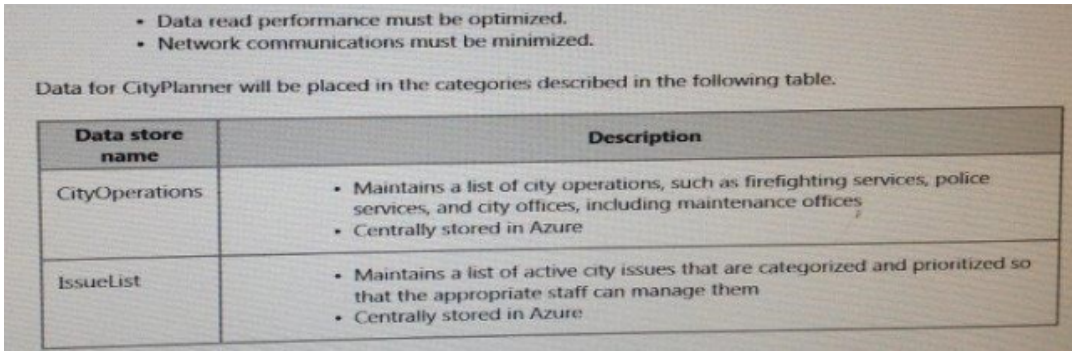
Data for the CityPlanner app is stored in an Azure database and accessed through an Azure API App named CityData.

CityPlanner will be tested for various devices by using emulators.

The final version of CityPlanner will be distributed through the Microsoft Store.

Requirements:
Business Requirement:
The CityPlanner app will need to be deployed to 1,000 city employees. Data operations will consistof approximately 90 percent read operations and 10 percent write operations.

You identify the following performance requirements:


- Data read performance must be optimized.
- Network communications must be minimized.

Data for CityPlanner will be placed in the categories described in the following table.

Data store name	Description
CityOperations	• Maintains a list of city operations, such as firefighting services, police services, and city offices, including maintenance offices • Centrally stored in Azure
IssueList	• Maintains a list of active city issues that are categorized and prioritized so that the appropriate staff can manage them • Centrally stored in Azure

The city employees will work in many different languages to support the municipality. Often the employees will have different difficult languages configured different devices.