Microsoft

Exam 70-482

Advanced Windows Store App Development using HTML5 and JavaScript

Version: 8.0

[Total Questions: 175]

Topic 1, Scenario 1

Application Information

You are developing two Windows Store apps by using JavaScript: a Personal Trainer app and a Client app. The apps will allow personal fitness trainers to interact with their remote clients.

Business Requirements- Personal Trainer Application

The Personal Trainer app must allow trainers to perform the following tasks:

- Create and store video and audio recordings of workout routines.
- View the profile and workout recordings for only one client at any time.

Business Requirements- Client Application

The Client app must allow clients to perform the following tasks:

- Browse a list of the trainer's workout recordings.
- Record workouts by using the built-in webcam.
- Play, pause, restart, and stop workout recordings.
- If the capability is supported, allow the client's webcam to pan as the client moves around the room.
- Upload workout recordings for trainer review.
- Update their individual profiles to indicate workouts completed, calories burned, and current weight.

The Client app must validate that the client's subscription is valid.

Technical Requirements- General

The Personal Trainer and Client apps must meet the following technical requirements:

- Connect to the Internet.
- Store workout recordings in the cloud.
- Enable retrieval of workout recordings by using a custom URL.
- Encapsulate the video player in a custom control.
- Identify the maximum zoom of the user's webcam in millimeters.
- Store client profiles in XML files in the trainers' Documents folders to allow for disconnected editing.
- Synchronize the XML files with cloud storage by using a background task when the Internet is available.
- Send trainer workout videos to cloud storage by using a background task when the trainer's device is idle. Indicate the status of the upload operation each time the trainer starts the app. Suspend the background task when the Internet is not available.
- Separate business and complex logic into WinMD components. The solution debugging settings must include the WinMD components.

Technical Requirements- Hardware Requirements

The Personal Trainer and Client apps must support the following hardware requirements:

- Windows 8
- Webcam, microphone, and speakers
- Internet connection

While testing the apps, you identify the following issues:

- ✎ When you start the app for the first time, the system displays this warning message: "This app needs permission to use your camera, which you can change in the app's settings."
- ✎ When you run the loadClientProfile( ) method in the clientData.js file, you receive an "Access Denied" exception.
- ✎ The findCamera( ) method in the video.js file throws an exception on some devices.
- ✎ The recordVideo( ) method in the video.js file throws an exception when the device does not support tilting.

clientData.js

```
CD01 function loadClientProfile() {
CD02   var fop = new Windows.Storage.Pickers.FileOpenPicker();
CD03   fop.viewMode = Windows.Storage.Pickers.PickerViewMode.thumbnail;
CD04
CD05   fop.fileTypeFilter.replaceAll([".xml"]);
CD06
CD07     (function (file) {
CD08       if (file) {
CD09         display(file);
CD10       }
CD11       else {
CD12         processError(file);
CD13       }
CD14     });
CD15 }
CD16
CD17 function saveClientProfile() {
CD18   var sp = new Windows.Storage.Pickers.FileSavePicker();
CD19   sp.defaultFileExtension = ".xml";
CD20   sp.suggestedFileName = "New Client";
CD21
CD22
CD23   sp.pickSaveFileAsync().then(
CD24     function (file) {
CD25       if (file) {
CD26         displaySaved(file);
CD27       }
CD28       else {
CD29         processError(file);
CD30       }
CD31     });
CD32 }
```

video.js

```
VD01 function recordVideo() {
VD02   var device = new Windows.Media.Capture.MediaCapture();
VD03   var videoDev = device.videoDeviceController;
VD04   var canTilt = videoDev.tilt.capabilities.supported;
VD05
VD06
VD07   ...
VD08 }
VD09
VD10 var cameraID;
VD11
VD12 function findCamera() {
VD13   var deviceInfo = Windows.Devices.Enumeration.DeviceInformation;
VD14   deviceInfo.findAllAsync(Windows.Devices.Enumeration.DeviceClass.videoCapture).then
(function (devices) {
VD15     cameraID = devices[0].id;
VD16   }, errorHandler);
VD17 }
VD18
```

background.js

```
BG01 function registerBackgroundTask(condition) {
BG02   var builder = new Windows.ApplicationModel.Background.BackgroundTaskBuilder();
BG03   builder.name = "videoLoader";
BG04   builder.taskEntryPoint = "background.js";
BG05   builder.setTrigger(
BG06     Windows.ApplicationModel.Background.SystemTrigger(
BG07
BG08   ));
BG09
BG10   ...
BG11 }
BG12
BG13 function unregisterBackgroundTask() {
BG14
BG15   var i = tasks.hasCurrent;
BG16   while (i) {
BG17     var task = tasks.current.value;
BG18     if (task.name === "videoLoader") {
BG19       task.unregister(true);
BG20     }
BG21     i = tasks.moveNext();
BG22   }
BG23 }
```

Question No : 1 - (Topic 1)

You need to complete the code to start the background task.

Which code segment should you insert at line BG07?

A. Windows.ApplicationModel.Background.SystemTriggerType.connectedStateChange, true

B. Windows.ApplicationModel.Background.SystemTriggerType.networkStateChange, false

C. Windows.ApplicationModel.Background.SystemTriggerType.sessionConnected, true

D. Windows.ApplicationModel.Background.SystemTriggerType.internetAvailable, false

Answer: D

Question No : 2 - (Topic 1)

You need to identify the required camera specifications.

Which code segment should you insert at line VD06?

A. var maxZoom = videoDev.zoom.capabilities.max;

B. var cameraType = videoDev.extendedZoomProperties("cameraType");

C. var cameraZoom = videoDev.zoom;

D. var minZoom = mediaCaptureSettings.min.millimeters;

Answer: A

Question No : 3 - (Topic 1)

You need to attach the background task.

Which code segment should you insert at line BG09?

A. var task = builder.register( );

B. var task = Windows. ApplicationModel.Background.BackgroundTaskBuilder.insert (builder);

C. var task: = Windows.ApplicationModel.Background.BackgroundTaskBuilder.insert (builder, this);

D. var task = builder.setTrigger ( );

Answer: A

Question No : 4 - (Topic 1)

You need to set the default storage location for the client profiles.

Which code segment should you insert at line CD04?

A. fop.defaultFolder = Windows.Storage.Pickers.PickerLocationId.documentsLibrary;
B. fop.defaultFolder = environment.getFolderPath
(environment.specialFolder.applicationData);
C. fop.suggestedStartLocation = "%AppData%";
D. fop.suggestedStartLocation =
Windows.Storage.Pickers.PickerLocationId.documentsLibrary;

Answer: A

Question No : 5 - (Topic 1)

You need to prevent the exception that is being thrown by the findCamera( ) method.

What should you do?

A. Check the devices collection for multiple devices.
B. Place a try block immediately after line VD12 and a catch block immediately before line
VD17. In the catch block, display the message property of the exception object to the user.
C. In line VD10, set the cameraID variable to null.
D. Check the devices collection for null before setting the cameraID variable.

Answer: D

Question No : 6 - (Topic 1)

You need to debug the error that is displayed in the warning message.

What should you do?

A. In the package.appxmanifest file, set the Webcam property in the Capabilities list.
B. Insert the following code segment at line VD18:
var dialog = new Windows.Media.Capture.CameraCaptureUI( );
dialog.photoSettings.enableCamera( );
C. In the package.appxmanifest file, add Camera Settings to the available declarations.

D. Insert the following code segment at line VD18:

var dialog = new Windows.Media.Capture.CameraCaptureUT( );

dialog.videoSet tings.enableCamera ( );

Answer: A

Question No : 7 - (Topic 1)

You need to ensure that client profiles can be saved in the required file format.

Which code segment should you insert at line CD21?

A. fop.suggestedSaveFile = "*.txt";
B. sp.fileTypeChoices.insert("Client Files", [".txt"]);
C. sp.fileTypeChoices = new.fileTypeItem("Client Files", [".xml"]);
D. sp.fileTypeChoices.insert("Client Files", ".xml"]);

Answer: D

Question No : 8 - (Topic 1)

You need to validate whether the additional video recording functionality for the Client app is supported.

Which code segment should you insert at line VD05?

A. var canPan = mediaCaptureSettings.pan.capabilities.supported;
B. var canPan = videoDev.pan.capabilities.supported;
C. var canTilt = videoDev.getDeviceProperty("tilt");
D. var canTilt = videoEev.getDeviceProperty("tilt supported");

Answer: B

Question No : 9 - (Topic 1)

You need to handle the exception error in the clientData.js file.

What should you do?

A. Modify the display function to handle the error.
B. Insert a try statement immediately after line CD07 and a catch block immediately before line CD14. Handle the error in the catch block.
C. Modify the processError function to handle the error.
D. Insert a try statement immediately after line CD01 and a catch block immediately before line CD15. Handle the error in the catch block.

Answer: A

Question No : 10 - (Topic 1)

You need to validate whether the additional video recording functionality for the Client app is supported.

Which code segment should you insert at line VD05?

A. var canFocus = videoDev.getEeviceProperty("focus");
B. var car.Zoom = videoDev.getEeviceProperty ("zoom") ;
C. var canPan = videoDev.pan.capabilities.supported;
D. var canPan = mediaCaptureSettings.pan.capabilities .supported;

Answer: C

Question No : 11 - (Topic 1)

You need to attach the background task.

Which code segment should you insert at line BG09?

A. var task = builder.setTrigger(this);
B. var task = builder.setTrigger( );
C. var task = builder.register ( );
D. var task = builder.register (this);

Answer: C

Question No : 12 - (Topic 1)

You need to enable trainers to select client profiles.

Which code segment should you insert at line CD06?

A. fop.pickMultipleFileAsync ( ). then(
B. fop.pickFileAsync ( ). then (
C. fop.pickSingleFileAsync ( ) .then{
D. fop.pickSingleFile ( ).then (

Answer: C

Question No : 13 - (Topic 1)

You need to prevent the device-specific tilting exception.

What should you do in the video.js file?

A. Insert a try statement immediately after line VD01 and a catch block immediately before line VD08. Handle the VideoNotFound exception.
B. Evaluate the canTilt variable. If true, bypass the code that tilts the camera.
C. Evaluate the canTilt variable. If false, bypass the code that tilts the camera.
D. Insert a try statement immediately after line VD01 and a catch block immediately before line VD08. Handle the MediaNotFound exception.

Answer: C

Question No : 14 - (Topic 1)

You need to retrieve the background task collection for the iteration loop.

Which code segment should you insert at line BG14?

A.
```
var tasks =
Windows.ApplicationModel.Background.BackgroundTaskRegistration.allTasks.first();
```

B.
```
var tasks = Windows.ApplicationModel.Background.BackgroundTaskRegistration.allTasks
();
```

C.
```
var tasks = Windows.ApplicationModel.Background.BackgroundTaskRegistration.first();
```

D.
```
var tasks = Windows.ApplicationModel.Background.BackgroundTaskBuilder.allTasks.first
();
```

A. Option A
B. Option B
C. Option C
D. Option D

Answer: A

Question No : 15 - (Topic 1)

You need to separate the business and complex logic into components.

Which actions should you perform? (Each correct answer presents part of the solution. Choose all that apply.)

A. In the JavaScript code, register the handler for the extension/mime-type.
B. In the package.appxmanifest file, create an Extensions section and register the component .dll file.
C. In Windows Explorer, drag the component .dll file to the project bin directory.
D. In Microsoft Visual Studio Solution Explorer, right-click the References folder and then click Scope to This.

Answer: A,B

Explanation: A: In Microsoft Internet Explorer 4.0 and later, MIME type determination occurs in URL monikers through the FindMimeFromData method. Determining the MIME type allows URL monikers and other components to find and launch the correct object server or application to handle the associated conten

B:

* An application that registers a background task needs to declare the feature in the application

manifest as an extension, as well as the events that will trigger the task. If you forget these steps, the registration will fail. There is no <Extensions> section in the application manifest of the Microsoft Visual Studio standard template by default, so you need to insert