

Exam Number/Code:70-481

Exam Name:Essentials of Developing
Windows Store Apps
using HTML5 and
JavaScript

Version: Demo

Topic 1, Southbridge Videos

Background

Southbridge Video rents and sells video games, movies, and other multimedia content. The company is currently expanding its operations. Southbridge video is developing a Windows Store news reader and social media app. Users will be able to view and interact with news stories that are related to the video game, entertainment, and related industries. Southbridge Video employees will also use the app to manage sales leads, order fulfillment, and customer-service related activities.

Business Requirements

The app has the following requirements.

Email

Users must be able to email news items to their contacts.

Navigation

Easy navigation access must be available to move to the next and previous pages. Users searching for specific news items must be able to navigate directly to an item from the search results pane.

News items

When a user selects a news item on newsPage.html, the news item should be displayed in the newsItem.html page.

The app must periodically retrieve new news items on the newsPage.html page. The app must allow the user to save annotated news. The app must display a short title for each news item.

Search capabilities

The app must allow users to search within available news items to locate articles of interest.

The app must provide search suggestions for users.

Authentication

Employees must be able to view the sales leads, order fulfillment, and customer- service related pages.

Authenticated users must be able to save news items to read at a later time. Authenticated users must be able to add and save handwritten notes to the news items.

The app must allow users to choose whether their credentials will be saved after they first log in. User credentials must be saved by default.

Technical Requirements

Email

When a user clicks the To button to email news items, only contacts that have email addresses should be displayed.

When multiple contacts are selected, the email addresses must be displayed in the

To text box as a semi-colon-delimited string.

News items

The app must periodically retrieve new items from a web service. The app must display a progress indicator while retrieving new items.

The news feed service must respond to all requests within 15 seconds. The app must not throw an error if the service does not respond within the allotted time.

Titles for news items must not overflow into other elements on the page.

Authenticated users must be able to add handwritten notes to the news items by using a stylus or the mouse. The app must support saving annotations along with the news item. The app must cancel the navigation from `newsItem.html` to `newsPage.html` if there are unsaved changes in the annotations area.

Search capabilities

The app must retrieve a list of phrases from the news service and provide them as search suggestions to users.

Authentication

Users connected to the corporate network must authenticate against an Active Directory server.

Users outside of the corporate network must authenticate by using forms-based authentication.

User credentials must not be transmitted in plain text.

Application Structure

Relevant portions of the app files are shown below. (Line numbers in the code segments are included for reference only and include a two-character prefix that denotes the specific file to which they belong.)

emailPage.html

```
EH01 <body>
EH02 ...
EH03 <div>
EH04   <buttonid="BtnTo">To</button>
EH05   <inputtype="text" id="To"/>
EH06   ...
EH07 </div>
EH08 </body>
```

emailPage.js

```
EJ01 function chooseContact(eventObject) {
EJ02   var picker = Windows.ApplicationModel.Contacts.ContactPicker();
EJ03
EJ04   picker.pickSingleContactAsync().then(function (contact) {
EJ05     });
EJ06 }
```

getCredential.js

```
GC01 function launchCredPicker() {
GC02   try {
GC03     var options = new Windows.Security.Credentials.UI.CredentialPickerOptions();
GC04
```

getCredential.js

```
GC01 function launchCredPicker() {
GC02   try {
GC03     var options = new Windows.Security.Credentials.UI.CredentialPickerOptions();
GC04
GC05     Windows.Security.Credentials.UI.CredentialPicker.pickAsync(options)
GC06       .then(function (results) {
GC07         ...
GC08       });
GC09   } catch (err) {
GC10     WinJS.log && WinJS.log("Error message: " + err.message, "sample", "error");
GC11   }
GC12 }
```

newsItem.html

```
NI01 <body>
NI02 ...
NI03 <div>
NI04   <canvasid="inkCanvas"></canvas>
NI05   <div>
NI06     <buttonid="draw">Draw</button>
NI07     <buttonid="select">Select</button>
NI08     <buttonid="erase">Erase</button>
NI09   </div>
NI10 </div>
```

newsItem.js

```
NJ01 function isInkInput(evt)
NJ02 {
NJ03
NJ04 }
NJ05
NJ06 function drawStrokes() {
NJ07
NJ08   strokeColor = "black";
NJ09   strokeWidth = 2;
NJ10 }
NJ11
NJ12 function selectStrokes() {
NJ13
NJ14   strokeColor = "red";
NJ15   strokeWidth = 1;
NJ15 }
```

newsPage.html

```
NH01 <body>
NH02 ...
NH03 <divclass="newsitemtemplate" data-win-control="WinJS.Binding.Template">
NH04   <imgclass="news-item-image" src="#" data-win-bind="src: backgroundImage; alt:
NH05   title" />
NH06   <divclass="news-item-info">
NH07     <h4class="news-item-description" data-win-bind="textContent: description"></h4>
NH09   </div>
NH10 </div>
NH11 </body>
```

newsPage.js

```
NP01 var nav = WinJS.Navigation;
NP02 ItemInvoked: function (eventObject) {
NP03     var item = data.items.getAt(eventObject.detail.itemIndex);
NP04
NP05 }
NP06 },
NP07
NP08     function provideSuggestions(queryText, suggestionRequest) {
NP09         var suggestionList = getSuggestions();
NP10         var query = queryText.toLowerCase();
NP11
NP12     }
NP13 }
NP14 }
NP15 }
NP16
NP17 function OnActivated(e) {
NP18     var detail = e.detail;
NP19
NP20     WinJS.Navigation.navigate("/html/NewsItem.html",id);
NP21 }
NP22 }
```

QUESTION: 1

- (Topic 1)

You need to configure the CredentialPicker object to meet the requirements.

Which code segment should you insert at line GC04?

- A. options.callerSavesCredential = false;
- B. options.CredentialSaveOption.unselected;
- C. options.CredentialSaveOption.selected;
- D. options.callerSavesCredential = true;
- E. options.CredentialSaveOption.hidden;

Answer: C

QUESTION: 2

- (Topic 1)

You need to implement the code to meet the search requirements.

Which code segment should you insert at line NP11?

- ☐ A.

```
for (var i = 0, len = suggestionList.length; i < len; i++) {  
    if (suggestionList[i] === query) {  
        suggestionRequest.searchSuggestionCollection.appendQuerySuggestion  
        (suggestionList[i]);  
    }  
}
```
- ☐ B.

```
for (var i = 0, len = suggestionList.length; i < len; i++) {  
    if (suggestionList[i] === query) {  
        suggestionRequest.searchSuggestionCollection.appendResultSuggestion  
        (suggestionList[i]);  
    }  
}
```
- ☐ C.

```
for (var i = 0, len = suggestionList.length; i < len; i++) {  
    if (suggestionList[i].substr(0, query.length).toLowerCase() === query) {  
        suggestionRequest.searchSuggestionCollection.appendResultSuggestion  
        (suggestionList[i]);  
    }  
}
```
- ☐ D.

```
for (var i = 0, len = suggestionList.length; i < len; i++) {  
    if (suggestionList[i].substr(0, query.length).toLowerCase() === query) {  
        suggestionRequest.searchSuggestionCollection.appendQuerySuggestion  
        (suggestionList[i]);  
    }  
}
```

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

Answer: D

QUESTION: 3

- (Topic 1)

You need to implement the code to retrieve news items according to the requirements.

Which code segment should you add to newsPage.js?

- ☐ A.

```
function fetchDailyNews(){
  WinJS.xhr({ url: "http://www.southridgevideo.com/feed" })
    .then(function progress(result) {
      progressDiv.innerText = result.readyState;},
      function complete(result) {
        ...
      });
}
```
- ☐ B.

```
function fetchDailyNews(){
  WinJS.xhr({ url: "http://www.southridgevideo.com/feed" })
    .then(function progress(result) {
      progressDiv.innerText = result.readyState;
    })
    .then(function complete(result) {
      ...
    });
}
```
- ☐ C.

```
function fetchDailyNews(){
  WinJS.xhr({ url: "http://www.southridgevideo.com/feed" })
    .done(function progress(result) {
      progressDiv.innerText = result.readyState;
    });
}
```
- ☐ D.

```
function fetchDailyNews(){
  WinJS.xhr({ url: "http://www.southridgevideo.com/feed" })
    .done(function complete(result) {
      ...
    }, null,
    function progress(result) {
      progressDiv.innerText = result.readyState;
    });
}
```

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

Answer: D

QUESTION: 4
 - (Topic 1)

You need to ensure that the app displays only contacts that meet the requirements.

Which code segment should you insert at line EJ03?

- ☐ A. `picker.selectionMode =
Windows.ApplicationModel.Contacts.ContactSelectionMode.fields;`
- ☐ B. `picker.selectionMode =
Windows.ApplicationModel.Contacts.ContactSelectionMode.contacts;`
- ☐ C. `picker.desiredFields.append(Windows.ApplicationModel.Contacts.ContactField
("Email", string);`
- ☐ D. `picker.desiredFields.append
(Windows.ApplicationModel.Contacts.KnownContactField.email);`

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

Answer: D

QUESTION: 5

- (Topic 1)

You need to ensure that the user can annotate news items according to the requirements.

Which code segment should you insert at line NJ03?

- ☐ A. `return (pointerDeviceType === "Pen" || (pointerDeviceType === "Mouse" && evt.button === 1));`
- ☐ B. `return (pointerDeviceType === "Pen" || (pointerDeviceType === "Mouse" && evt.button === 0));`
- ☐ C. `return (pointerDeviceType === "Pen" || (pointerDeviceType === "Mouse" && evt.type === 0));`
- ☐ D. `return (pointerDeviceType === "Pen" || (pointerDeviceType === "Mouse" && evt.type === 1));`

- A. Option A
- B. Option B

- C. Option C
- D. Option D

Answer: B

QUESTION: 6

- (Topic 1)

You need to implement the code to meet the requirements for handling changes in the annotation area of the newsItem.html page.

Which event handler should you add to newsItem.js?

- ☐ A.

```
WinJS.Navigation.addEventListener("beforenavigate", onbeforeNavigate);
function onbeforeNavigate(eventObject) {
    if (hasChanges) {
        eventObject.detail.setPromise(WinJS.Promise.wrap(true));
    }
    else {
        eventObject.detail.setPromise(WinJS.Promise.wrap(false));
    }
}
```
- ☐ B.

```
WinJS.Navigation.addEventListener("navigating", onNavigating);
function onNavigating(eventObject) {
    if (hasChanges) {
        eventObject.detail.setPromise(WinJS.Promise.wrap(true));
    }
    else {
        eventObject.detail.setPromise(WinJS.Promise.wrap(false));
    }
}
```
- ☐ C.

```
WinJS.Navigation.addEventListener("beforenavigate", onbeforeNavigate);
function onbeforeNavigate(eventObject) {
    eventObject.detail = null;
}
```
- ☐ D.

```
WinJS.Navigation.addEventListener("navigating", onNavigating);
function onNavigating(eventObject) {
    eventObject.detail = null;
}
```

- A. Option A
- B. Option B
- C. Option C

D. Option D

Answer: A

QUESTION: 7

- (Topic 1)

You need to ensure that the navigation requirements for displaying news items are met.

Which code segment should you insert at line NP04?

- A. `nav.navigate("/html/newsPage.html");`
- B. `nav.navigate ("/html/newsItem.html", {item: item});`
- C. `nav.forward ("/html/newsItem.html");`
- D. `nav.forward("/html/newsPage.html", {item: item});`

Answer: B

QUESTION: 8

- (Topic 1)

You need to implement the code to meet the requirements for displaying content from search results.

Which code segment should you insert at line NP19?

- ☐ A. `if (detail.kind === Windows.ApplicationModel.Activation.ActivationKind.search) {
 var id = FindNewsId(detail.arguments);`
- ☐ B. `if (detail.kind === Windows.ApplicationModel.Activation.ActivationKind.search) {
 var id = FindNewsId(detail.queryText);`
- ☐ C. `if (detail.kind === Windows.ApplicationModel.Activation.ActivationKind.launch) {
 var id = FindNewsId(detail.queryText);`
- ☐ D. `if (detail.kind === Windows.ApplicationModel.Activation.ActivationKind.launch) {
 var id = FindNewsId(detail.arguments);`

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

Answer: B

QUESTION: 9

- (Topic 1)

You need to ensure that the requirements for capturing user input on the `newsItem.html` page are met.

Which code segments should you use? (Each correct answer presents part of the solution.

Choose all that apply.)

- A. `InkManager.mode = Windows.UI.Input.Inking.InkManipulationMode.selecting;`
- B. `InkManager.mode = Windows.UI.Input.Inking.InkRecognitionTarget.selected;`
- C. `InkManager.mode = Windows.UI.Input.Inking.InkManipulationMode.inking;`
- D. `InkManager.mode = Windows.UI.Input.Inking.InkRecognitionTarget.all;`

Answer: A,B

QUESTION: 10

- (Topic 1)

You need to ensure that the layout for `newsPage.html` meets the requirements.

Which layout should you choose?

- ☐ A.

```
#MyFlexbox {  
  display: -ms-grid;  
  background: gray;  
  border: blue;  
  -ms-grid-columns: auto;  
}
```
- ☐ B.

```
#MyFlexbox {  
  display: -ms-flexbox;  
  background: gray;  
  border: blue;  
  -ms-flex-wrap: wrap;  
}
```
- ☐ C.

```
#MyFlexbox{  
  display: -ms-flexbox;  
  background: gray;  
  border: blue;  
  -ms-flex-align:stretch;  
}
```
- ☐ D.

```
#MyFlexbox {  
  display: -ms-inline-grid;  
  background: gray;  
  border: blue;  
  -ms-grid-columns: auto;  
}
```

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

Answer: B