

Assignment 2

Due Date:

You must demonstrate your program during class time. (It is an individual assignment)

	<i>Date</i>	<i>Time</i>
Softcopy	20-February-2022 (Sunday)	11:59PM
Demo	23 Feb, 2022- Sec3	During class time
	24 Feb, 2022- Sec1	
	7 Mar, 2022- Sec 2	
Demo cut-off date	10-March-2022 (Thursday)	5:00PM

Students are expected to demo their projects during specified demo time which takes place during regular class. In special circumstances, if you miss the demo during class time, please make an appointment and finish your demo before the cut-off date mentioned above. Failing to do so will cost you demo marks specified in the marking sheet (the last page of this document)

Topic:

- Enhance the prototype created in Assignment 1 with jQuery validation. This version will be used in the next assignments.

Before you begin:

- You must complete Assignment 1 before proceeding.
- You must know how to search and use the online jQuery Mobile Docs to enhance your mobile app.
- Make yourself familiarize with the hands-on examples done in the lab during class time.
- Make sure to view the screenshots in color, as you will be required to match the color themes used exactly.
- The assignment specification and screenshots are made assuming a student's name Jason Bourne (and initial is JB). Replace Jason Bourne with your full name, JB with your own initial. Also replace xx with your own initials.
- Make sure to fulfill all programming and assignment standards. The Standards Summary is available at eConestoga.
- All javascript files must have your initial as prefix.
- See AvengersDB-iteration2 hands on program in details.

Problem Specification:

Task 1: Create Assignment 2 project

- Create an empty project and name it: XXFeedbackA2 (where XX is your initials). Copy all the files and folders from your assignment 1 project except `.idea` folder (`.idea` is a hidden folder created by Webstorm. If you use any other IDE, the `.idea` folder will not exist).
- Add the following Javascript files under `js` folder:
 - `xxdatabase.js`
 - `xxDAL.js`
 - `xxfacade.js`
 - `xxutil.js`
 - `xxglobal.js`
- Add the following Stylesheet file under `css` folder:
 - `xxmystyle.css`
- Include all of them to `index.html`
- Add ready event to `xxglobal.js` file. All the event handlers must be defined in `xxglobal.js` file.
- Provide `name` and `id` attributes for the following items in your project. Missing `id` and `name` will result in deduction of marks (Check the marking sheet – the last page of the document). These requirements will be considered as Programming Standards.

Item/tag	id	name
Page	√	
Listview	√	
Textbox	√	√
Form	√	√
Dropdown List/Combobox	√	√
Textarea	√	√
Checkbox	√	√
Button	√	√
Radiobutton	√	√
<input>	√	√

Table 1: id and name requirement chart

Task 2: Update 'Home' page

- Update the headers to indicate Assignment 2 (Change all A1 to A2). See the screenshot below. Rest of the home page will be the same as your assignment 1.

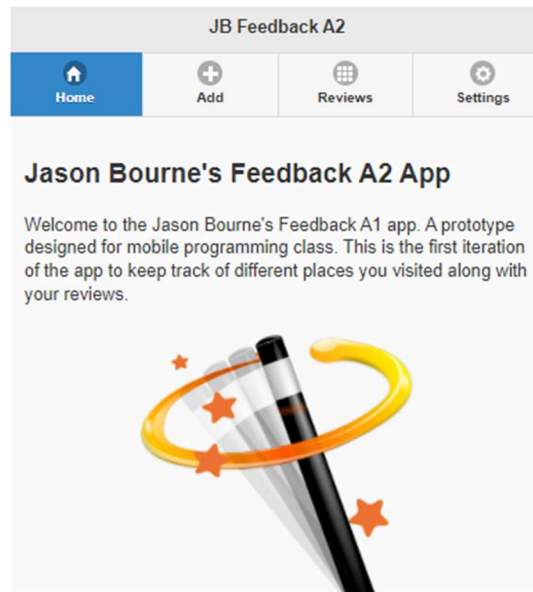
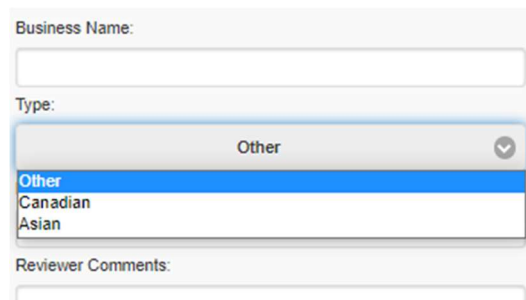


Figure 1: Screenshot of Home page for Assignment 2

Task 3: Update 'Add Feedback' page

- Update the page according to the following screenshot.
- Add a "Type" ComboBox containing "Other", "Asian" and "Canadian". "Other" will be shown by default. Please check Figure 2
- If 'Do you want to add your ratings' checkbox is checked then 4 rating TextBoxes (Food Quality, Service, Value (Hint: `input type="number"`) and Overall Rating (Calculated) (Hint: `input type="text"`) will be visible. Otherwise, they will be hidden. Check Figure 3 and Figure 4.
- When the page will be shown, 'Do you want to add your ratings' checkbox will be unchecked by default. Check Figure 3
- Overall Rating textbox is Read-only
- The 3 rating textboxes will be initialized with 0 when they become visible. Check Figure 5.
- Any change in the 3 rating text boxes will automatically update the overall Rating (calculated) Textbox (Show average will follow the formula:
 - $(\text{quality} + \text{service} + \text{value}) * 100/15.$
 - Add a % symbol
 - Check Figure 4
- Implement the show/hide feature in `xxglobal.js` file. Hint: put the 4 TextBoxes in a `div`, show and hide the `div` if the check box is checked/unchecked, respectively. See jQuery built in function `show()`, `hide()` (https://www.w3schools.com/jquery/jquery_hide_show.asp)



The screenshot shows a web form with the following elements:

- Business Name:** A text input field.
- Type:** A ComboBox with a dropdown arrow. The dropdown menu is open, showing three options: "Other" (highlighted in blue), "Canadian", and "Asian".
- Reviewer Comments:** A text area.

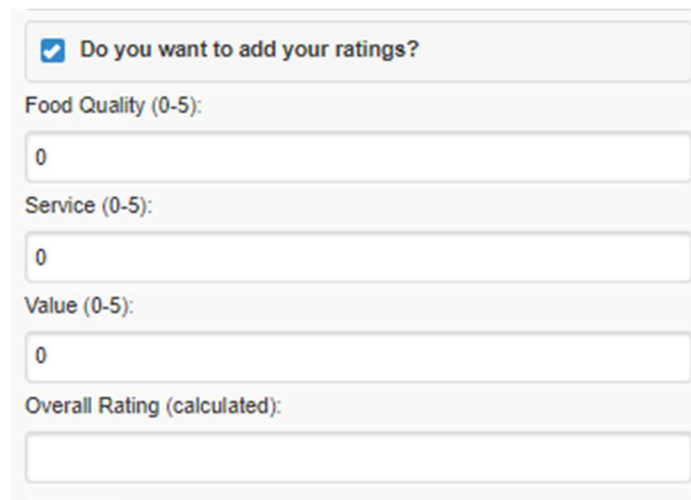
Figure 2: ComboBox content

The screenshot shows a mobile application interface for adding feedback. At the top, there's a header 'Add a Feedback' with four navigation icons: Home, Add (highlighted in blue), Reviews, and Settings. Below the header, the form contains several input fields: 'Business Name' (text), 'Type' (dropdown menu showing 'Other'), 'Reviewer Email' (text), 'Reviewer Comments' (text area), 'Review Date' (calendar icon), and a checkbox labeled 'Do you want to add your ratings?' which is currently unchecked. A blue 'Save' button is at the bottom of the form. The footer shows '© 2022 Jason Bourne'.

Figure 3: Screenshot of Add Feedback page - Do you want to add your ratings unchecked.

This screenshot shows the same 'Add a Feedback' form, but with the 'Do you want to add your ratings?' checkbox checked. Below the checkbox, there are three rating fields: 'Food Quality (0-5)' with a value of 2, 'Service (0-5)' with a value of 2, and 'Value (0-5)' with a value of 3. Below these, the 'Overall Rating (calculated):' field shows '47%'. A blue 'Save' button is at the bottom. The footer shows '© 2022 Jason Bourne'.

Figure 4: Screenshot of Add Feedback page - Do you want to add your ratings checked.

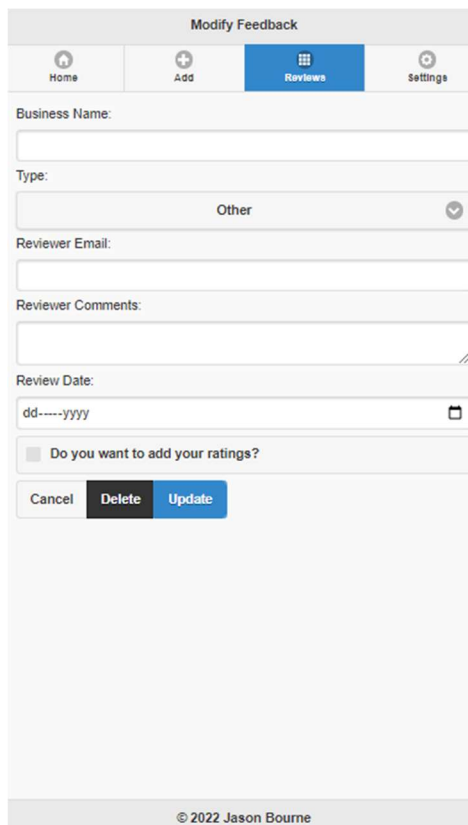


A screenshot of a mobile application form for adding ratings. At the top, there is a checkbox labeled "Do you want to add your ratings?" which is checked. Below this, there are three input fields for "Food Quality (0-5)", "Service (0-5)", and "Value (0-5)", each containing the number "0". At the bottom, there is a label "Overall Rating (calculated):" followed by an empty input field.

Figure 5: Ratings are initialized with 0 when they become visible (by selecting Do you want to add your ratings checkbox)

Task 4: Update 'Modify Feedback' Page

- Update the 'Modify Feedback' page in the same way as 'Add Feedback' page.
- 'Do you want to add your ratings' checkbox will behave in the same way. Check the following screenshot(s) Figure 6 and Figure 7



A screenshot of the "Modify Feedback" page in a mobile application. The page has a top navigation bar with icons for Home, Add, Reviews (selected), and Settings. Below the navigation bar, there are several form fields: "Business Name:" (text input), "Type:" (dropdown menu showing "Other"), "Reviewer Email:" (text input), "Reviewer Comments:" (text area), and "Review Date:" (date picker showing "dd----yyyy"). At the bottom of the form, there is a checkbox labeled "Do you want to add your ratings?" which is unchecked. Below the checkbox are three buttons: "Cancel", "Delete", and "Update". The footer of the page shows "© 2022 Jason Bourne".

Figure 6: Screenshot of Modify Feedback page - Do you want to add your ratings unchecked.

Modify Feedback

Home Add Reviews Settings

Business Name:

Type:

Other

Reviewer Email:

Reviewer Comments:

Review Date:

dd----yyyy

☒ Do you want to add your ratings?

Food Quality (0-5):

0

Service (0-5):

0

Value (0-5):

0

Overall Rating (calculated):

Cancel Delete Update

© 2022 Jason Bourne

Figure 7: Screenshot of Modify Feedback page - Do you want to add your ratings checked.

Task 5: Implement validation

- Include jQuery validation Javascript (available in eConestoga->Content->Resources->_lib.zip) in the index.html file
- Define your validation logic in xxutil.js file
- Add the following styles to xxmystyle.css file:

```
label.error{
    color: #F00;
    font-weight: bold;
}

input.error,
select.error,
textarea.error {
    border: 1px red solid;
}
```
- Both 'Add a Feedback' and 'Modify Feedback' pages will have similar validation (defined in xxutil.js file). Hint: You need to implement 2 validation functions; one for each form.
- The validation will get triggered and show necessary messages below input fields when:

- Save button is clicked on Add Feedback page
 - Print “Add Form is valid” if all inputs are valid and “Add Form is invalid” if there are invalid inputs.
- Update button is clicked on Modify Feedback page
 - Print “Modify Form is valid” if all inputs are valid and “Modify Form is invalid” if there are invalid inputs.
- Validation rules:
 - You may specify your own error message string.
 - Business Name: Required and length must be 2-20 characters long
 - Reviewer Email: Required and valid email address
 - Any valid email will be sufficient. Making only Conestoga email valid will result in deduction of marks.
 - Review Date: Required
 - If ‘Do you want to add your ratings?’ checkbox is checked
 - Food Quality, Service and Value: Value must be 0-5
 - Note: don’t use `required`, `min` and `max` attributes for input controls in the html file, rather define your own rules and messages for them in `xxutil.js` file. I should be able to input any number, valid or invalid. The validation will show error message in case of invalid input.
 - In case of invalid input in any of the ratings, Overall Rating (calculated) will be updated according to the usual formula mentioned in Task 3. No special checking is necessary.
 - Check the following screen shot carefully.

The screenshot shows a feedback form with the following fields and values:

- Business Name: a (Error: Length must be 2-30 characters long)
- Type: Other (dropdown menu)
- Reviewer Email: aa (Error: Email entered is invalid)
- Reviewer Comments: (empty text area)
- Review Date: dd- - - - - yyyy (Error: Review date is required)
- Do you want to add your ratings? (checked checkbox)
- Food Quality (0-5): -1 (Error: Value must be 0-5)
- Service (0-5): 8 (Error: Value must be 0-5)
- Value (0-5): 2
- Overall Rating (calculated): 60%

The console window on the right shows the following messages:

- 1 Issue: 1
- 2 Add Form is invalid jpfacade.js:14

Figure 8: Example Validation 1 - error message shown when "Save" button is clicked on Add Feedback page. Note console window beside the form. Also note how the Overall Rating is calculated.

The screenshot shows a feedback form with the following fields and values:

- Business Name: (empty) (Error: Please enter the business name)
- Type: Other (dropdown menu)
- Reviewer Email: (empty) (Error: Reviewer Email is required)
- Reviewer Comments: (empty text area)
- Review Date: dd- - - - - yyyy (Error: Review date is required)
- Do you want to add your ratings? (checked checkbox)
- Food Quality (0-5): -3 (Error: Value must be 0-5)
- Service (0-5): 8 (Error: Value must be 0-5)
- Value (0-5): 0
- Overall Rating (calculated): 33%

The console window on the right shows the following messages:

- 1 Issue: 1
- 2 Add Form is invalid jpfacade.js:14
- Modify Form is invalid jpfacade.js:23

Figure 9: Example Validation 2 - error message shown when "Update" button is clicked on Modify Feedback page. Note console window beside the form

The image shows a feedback form on the left and a console window on the right. The form fields are: Business Name (Tim's Burger), Type (Other), Reviewer Email (jason@gmail.com), Reviewer Comments (empty), Review Date (22-Jan-2022), a checkbox for 'Do you want to add your ratings?' (checked), Food Quality (0-5) (2), Service (0-5) (2), Value (0-5) (2), and Overall Rating (calculated) (40%). The console window on the right shows 1 issue: 'Add Form is invalid' at jbfacade.js:14, 'Modify Form is invalid' at jbfacade.js:23, and 'Modify Form is valid' at jbfacade.js:20.

Figure 10: Example Validation 3 - no error message shown when "Update" button is clicked on Modify Feedback page with valid input. Note console window beside the form

Task 6: Update Settings page

- Settings page will show up with "Default Reviewer Email" filled with your own email address. Check Figure 11. Use your own Conestoga email address as initial email when the page is shown.
- 'Save Defaults' button will save the 'Default reviewer Email' to local storage and show a message through alert. Check Figure 12.

The image shows the Settings page with a navigation bar at the top containing Home, Add, Reviews, and Settings (selected). Below the navigation bar, there is a text input field for 'Default reviewer Email' containing 'jbourne@spy.com'. At the bottom, there are two buttons: 'Save Defaults' (blue) and 'Clear Database' (black).

Figure 11: Setting page (Default reviewer email is auto filled with your own email address)

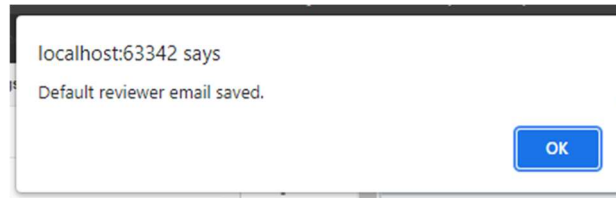


Figure 12: Alert shown when Save Defaults is clicked

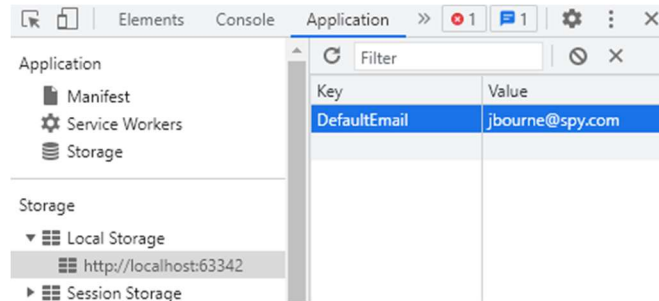


Figure 13: Screen shot of Chrome Developers Tools (Application tab) showing Local Storage

Task 7: Test your app

- Open Developer Tool of chrome. You may use normal browser mode to test your application
- Check if your application pages look exactly the same as screen shots provided in this specification document.
- Check if your application behaves according to this specification.

Task 8: Upload app

- Make a zip file `xxAssignment2.zip` that will contain
 - Complete project for your app
 - After unzipping, I should be able to run your application without any modification.
- Login to eConestoga and upload to : Assignment 2.
- For late submission: marks will be deducted per day as specified below.

Task 11: Demo your app

- Demo your app during class time. See the announcement at the beginning of this document. Check Schedule Summary-2022 document available under Content->Course Information module for details.

Marking Sheet

	Description	Marks Allocated	Marks Achieved
1	Home Page designed as specified	10	
2	Add a Feedback page is designed as specified	10	
3	Add a Feedback page ratings show/hide	10	
4	Add a Feedback page validation (in Save button's click handler)	15	
5	Modify Feedback page is designed as specified	10	
6	Modify Feedback page ratings show/hide	5	
7	Modify Feedback page validation (in Update button's click handler)	10	
8	Settings page stores info to local storage	10	
9	Overall rating is updated automatically whenever any of the quality, service, value changes in add and modify pages.	20	
Deduction			
	Runtime errors	15 x _____	
	Assignment Standard (proper project name, etc., see the standard documents for detail)	5 x _____	
	Programming Standard	1 x _____	
	Late Submission (softcopy)	_____ days	
	id attribute is missing for any input control	3 x _____	
	name attribute is missing for any input control	3 x _____	
	JavaScript file name not prefixed	2 x _____	
	Making only Conestoga Email address valid	5	
	Using required, min, max attributes instead of defining your own rules and messages	5	
	Bugs and other requirements mentioned in this specification	3-10 based on severity	
	Failing to answer to questions during demo	5-10 based on severity	
	No Demo	60	
	Total		

Late Penalty (Softcopy submission)

Days Late	Penalty %
1	5
2	10
3	20
4	30
5	45
6	60
7	80
8	100

Please note: How “Days Late” is calculated: Your assignment is due on Sunday 11:59pm. You are considered 1 day late if you submit on anytime on Monday (until 11:59PM). If you submit anytime on Tuesday (until 11:59PM), you are considered 2 days late.