ITMD 465/565

Project 1

Introduction

In this project you are tasked with creating a single page JavaScript/HTML/CSS application. The application consists of a Note List application.

Objective

Create a single page HTML5 application for taking a list of notes. This single HTML page will open in the browser and all interactions will happen in the same page with JavaScript, the browser itself should never have to refresh/reload the page. The data from the note list will be persistent between loads using a local browser storage API.

General Requirements

- All HTML tags and page structure should be **HTML5** compliant
- CSS and JavaScript needs to be placed in **EXTERNAL FILES**
- Application should reside in a **SINGLE HTML PAGE NAMED app.html**
- jQuery can be used for the project
- Any CSS Framework, like bootstrap, can be used for the project
- The list of notes must persist in local storage in the browser. If the browser is closed and reopened the notes will still be there. This can be done with localStorage for undergraduates, Indexed DB for graduate students. Do not use sessionStorage, we want persistence between browser sessions. Undergraduates can use Indexed DB also.
- The application must allow us to create a new note, delete a note, update a note, see both a list of all notes, and see the details of a single note. All in one html page using JavaScript to do the functionality and change the UI.
- When the application first loads you should see a list view of all the notes saved. If there are no notes you need to show that somehow with a message.
- You need to have a button/link that lets you add a new note to the list.
- The new note form needs to collect: note subject, note message, author name.
- Note data should consist of: Name, Subject, Message, and a date/time stamp when it was created/updated. Do not let the user input the timestamp it should be calculated.
- List view should only show message subject and date/time, not full message text. Detail view should show all data. When you click a message in the list view in some way it should show in the detail view.
- You have to be able to delete a note via a delete button/link. The delete can happen in the list view or in the detail view.
- Style the User Interface with CSS so it is functional, clear, and intuitive to use. UI that is confusing, not styled, or hard to understand will not receive full points. Do not have any dead ends in your user interface. You should be able to always get back to the list,

cancel a new note. The user should not click the browser back button since that will mess up the app. Very important to not have dead ends in your UI
- Specific user interface layout decisions are left up to you

Graduate Additional Requirements

If you are involved in **any section of 565 you are registered in the class as a graduate student and** you need to complete the additional requirements listed here.

- You must use Indexed DB for persistent storage of the Notes.
- Your JavaScript must not be in the global namespace.
- Show a total count on the number of notes in the list view.
- In the list view also show how many characters are in the full message text in addition to the subject and date/time.
- Be careful of JavaScript injection in your text fields and don't allow it. We will test for it. We should not be able to put <script>alert('test')</script> in your message fields and see an alert prompt. Research how to encode or replace the special characters. Solutions are very easy to find online.
- CSS will be expected to be at a higher level of quality. Application should not have any confusing UI aspects. Application must not have any dead ends. Graduate students are expected to submit a much more professional and finished UI than other students and will be graded at a higher level. The more creative you display the application elements and how intuitive the user interface is will be looked at.

README File

Not Required for this Project unless you need to explain features or problems with your application. If you feel you need to explain anything in your application or mention any libraries used other than jQuery or Bootstrap include a readme.pdf file with that information and describe what you used.

Due Date / Late Policy

This assignment is due **Sunday November 5, 2017 11:59 PM Chicago Time**. See syllabus for full late policy. **No Extensions**.

Submission Guidelines

You must upload your submission, to the blackboard assignment by the due date. The submission must be in the following format and structure. If you do not submit your assignment exactly as specified, you will receive an immediate 5% deduction.

Submission Format Specification:

YourUsername_ Project1.zip

Your zip should include:
app.html
any external css files used
any external js files used
any image files used
readme.pdf file if needed
The css, js, images, and any other files may be placed in subfolders for organization

*****Make sure all assets and links are relative and be very careful of capital vs lowercase. We will unzip the zip and expect it to work on our system no matter what OS or location we extract it to. Test your zip file in a different directory/computer.**

*****Test in multiple browsers.**