

The Blackboard Bookmarking Bar

**Software Engineering COMP 4110
University of Massachusetts Lowell
Fall 2020**

Team members:

Project Manager: Anson Cheang

Facilitator: Shane Calla, Seattle Bourassa

Customer Liaison: Arthur Rosa

Configuration Manager: Jayendra Rathore

Customer: Students and Teachers

Instructor: Dr. James Daly*

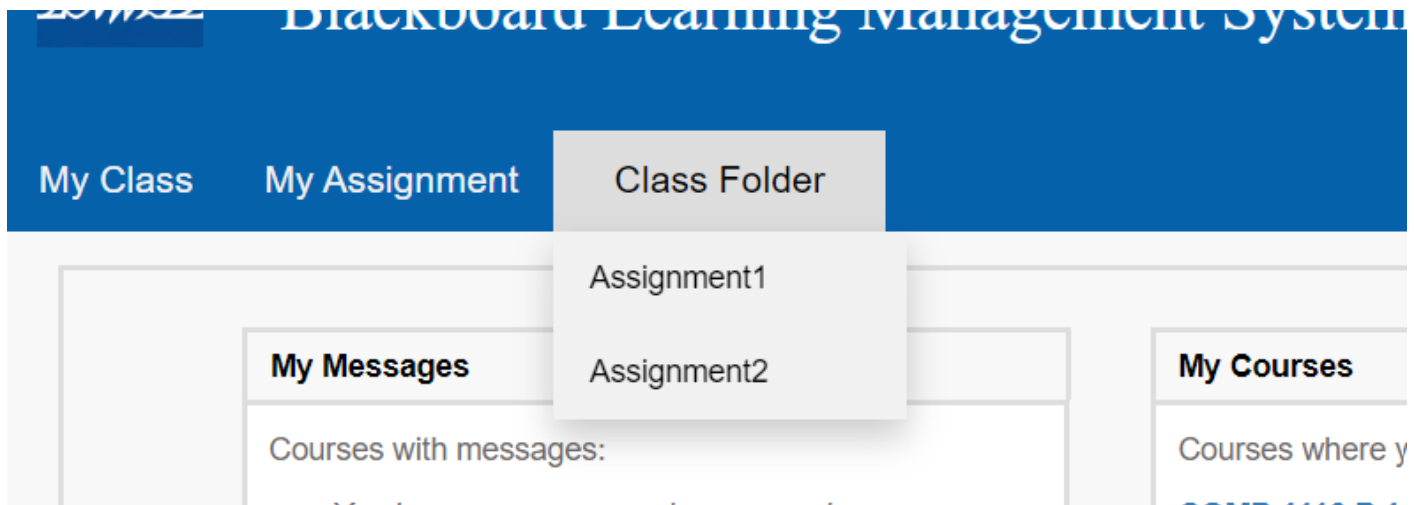
*Please direct all inquiries to the instructor.

Project Overview

- System provides the ability to add and remove bookmarks to and from the bookmark bar
- Motivation for project
 - Forgot where the assignment/item is stored
 - Getting lost in folders
 - Too deep within several folders

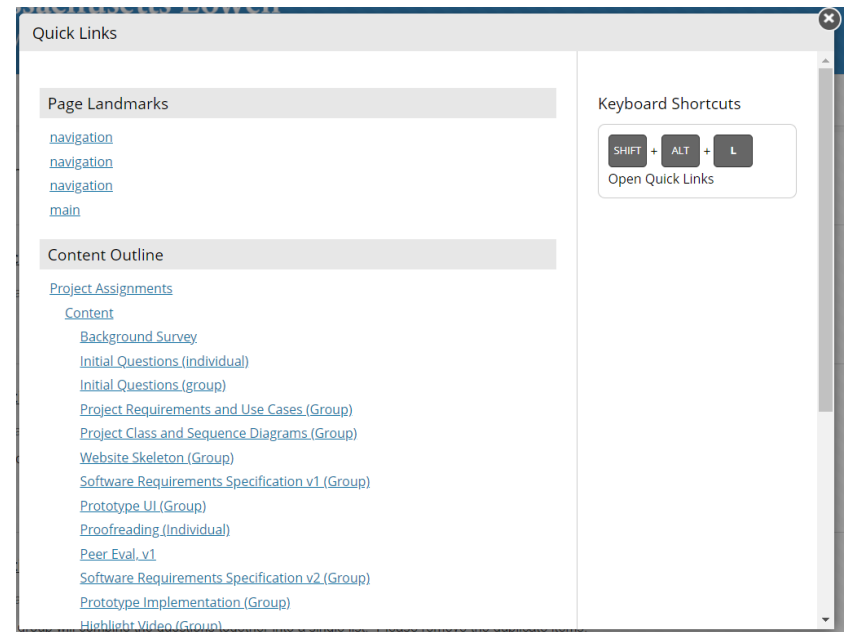
Goals

- Add and remove bookmarks
- Folders
- Bookmarking bar



What We're Improving

- Quick Links
 - Forgotten
 - Series of links
 - locates the link



Forgot where the item is

Similar names

Literally forgetting

Announcements

Zoom Meetings

Slides

Homework

Quiz & Exams

Notes



Readings

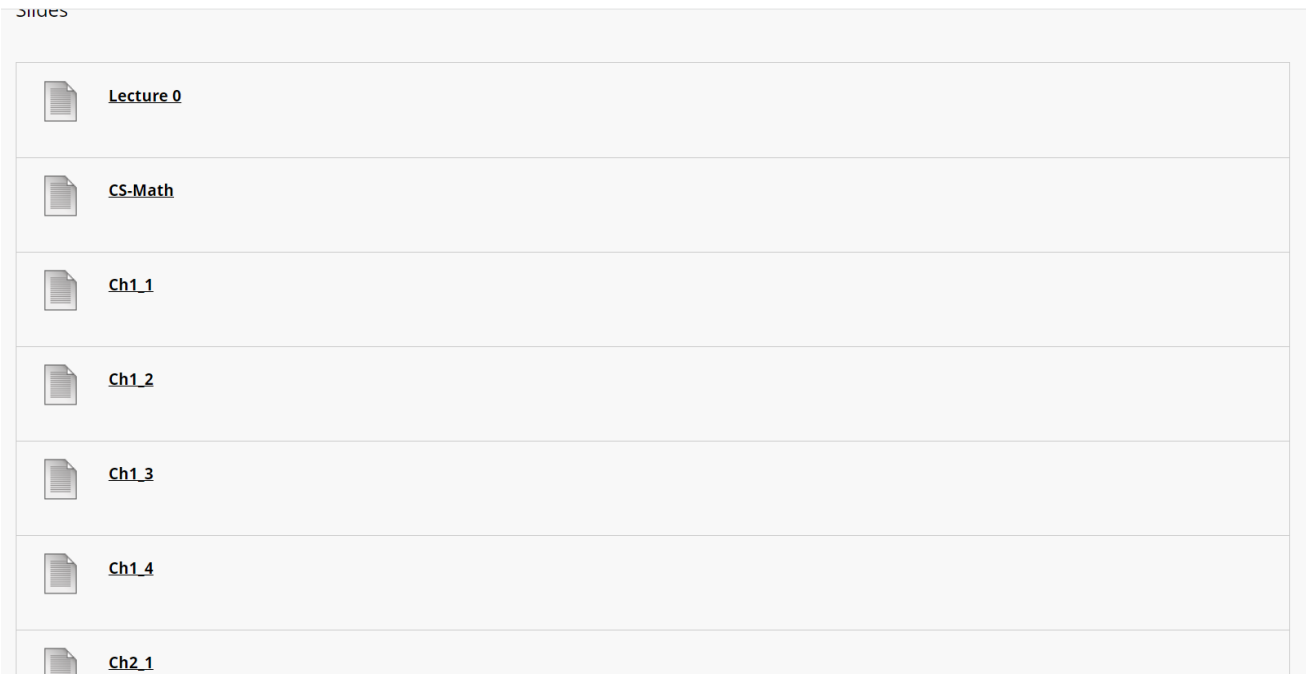


Textbook and Chapter Readings

Course textbook and dedicated chapters for reading/reviewing prior to coming to class.

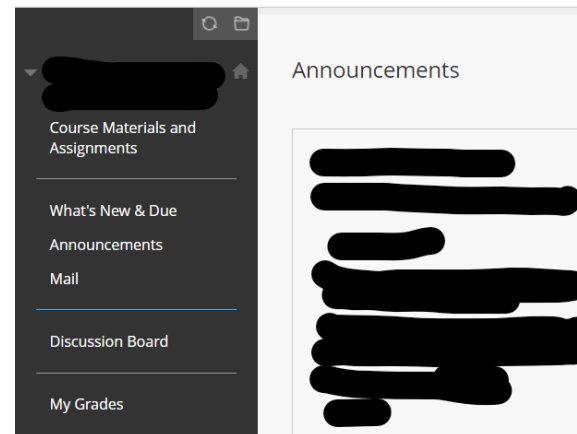
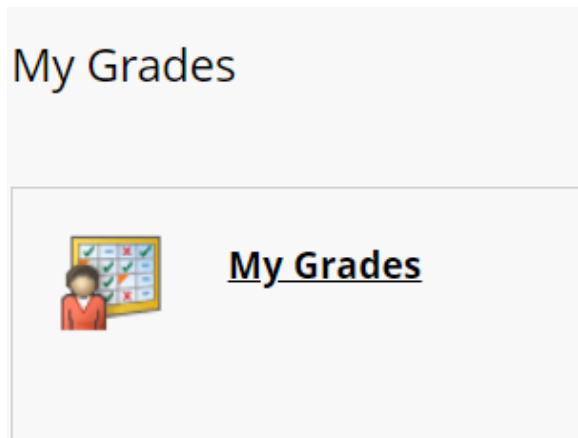
Getting lost in folder

- Some folder contains more than 10 items
- Confusing notes



Too deep

- Unnecessary folders/locations
- Repetitive action



Overview of Features

- Add and remove bookmarks from ribbon/bookmark bar
- Ability to change the name of the bookmark
- Store bookmarks in folders
 - See contents of Folder
- Save Bookmark Bar throughout pages

Bookmarks & Folders



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Work Folder

The Mythical Man-Month

Bookmarks:

are Blackboard Resources on the Bookmark Bar

- left clicking redirects the user to the link the resource is located. (ex. Assignment -> assignment page)
- right-clicking displays an Edit Box where the user can manipulate the Bookmark

Bookmark Folders:

used to store bookmarks

- left-clicking displays Bookmarks in folder
- bookmarks in folder can be manipulated with the Edit Box
- right-clicking displays an Edit Box to manipulate the folder

Work Folder

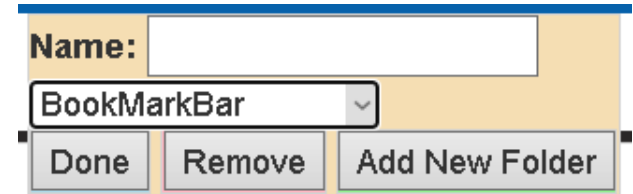
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Database (due tomorrow)

Final Essay due 12/10

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Edit Box



The Edit Box is how the user interacts with the Bookmark Bar

Edit box works in two different ways

- For Blackboard resources
- For Bookmarks on the Bookmark Bar

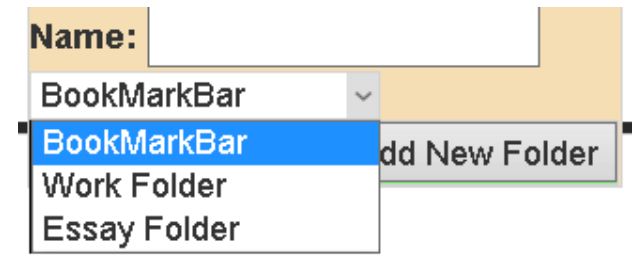


Blackboard resources:

- Add a Bookmark with a name the user provides
- Select the location for Bookmark
- Add a new Folder to Bookmark Bar
- Remove Bookmark Resource from Bookmark Bar

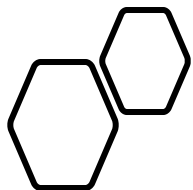
Bookmark & Bookmark Folders :

- Change name of a Bookmark/Folder
- Add a new Folder to Bookmark Bar
- Remove a Bookmark
 - Removing a folder removes all Bookmarks inside



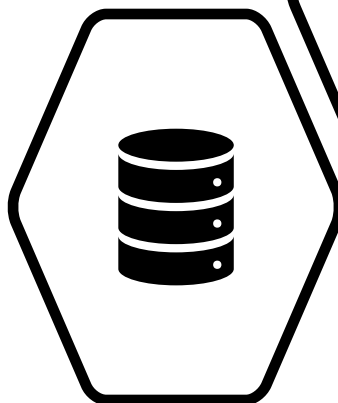
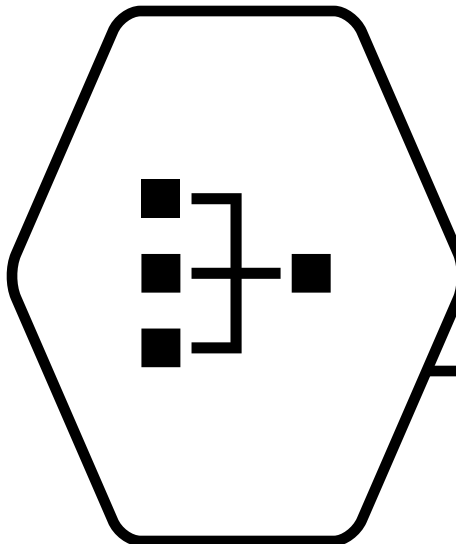
Work Folder

Essay Folder



Domain Research

- Investigating databases
- Needed to apply domain knowledge on storing the bookmark information

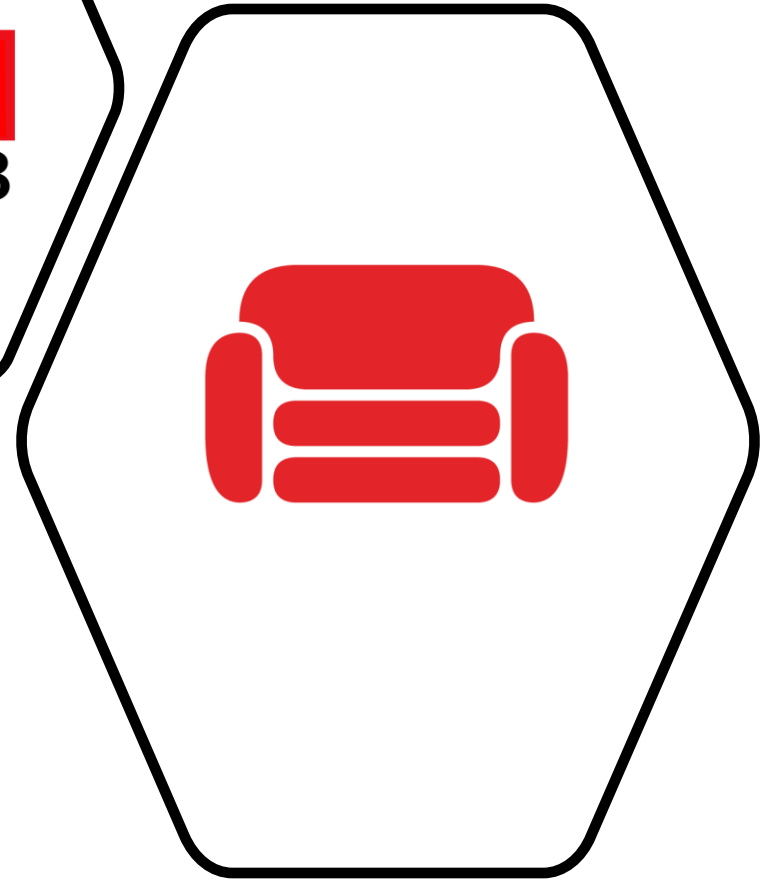
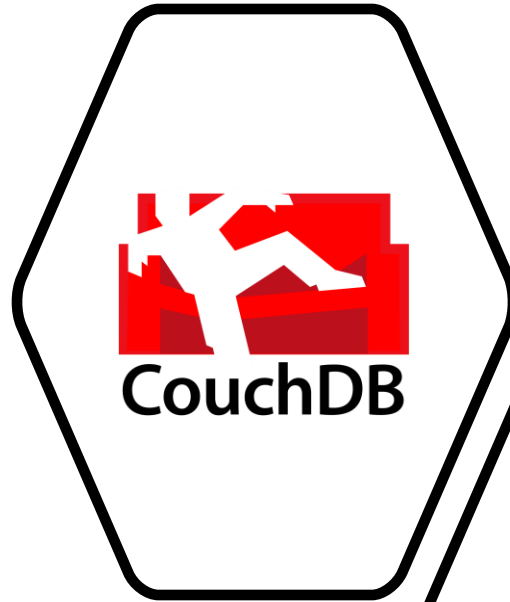
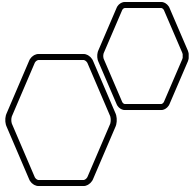


Ninja, Gifs. "Master of Your Domain." *Gifs Ninja*, 2017, <https://gifs.ninja/master-of-your-domain/>. Accessed 6 Dec. 2022.



JSON

- JavaScript Object Notation
- Universal data structures
 - Easy to use across languages
- Able to store bookmark data
 - Array of
 - Name
 - Id
 - Type



CouchDB

- Single node server to host JSON files
- Only access to local machines
- Cannot carry data over multiple pages
- RELAX



Cloudant

- Cloud based database server
- Can carry local databases across pages and systems
- Ideal cloud service backed by CouchDB

CORS

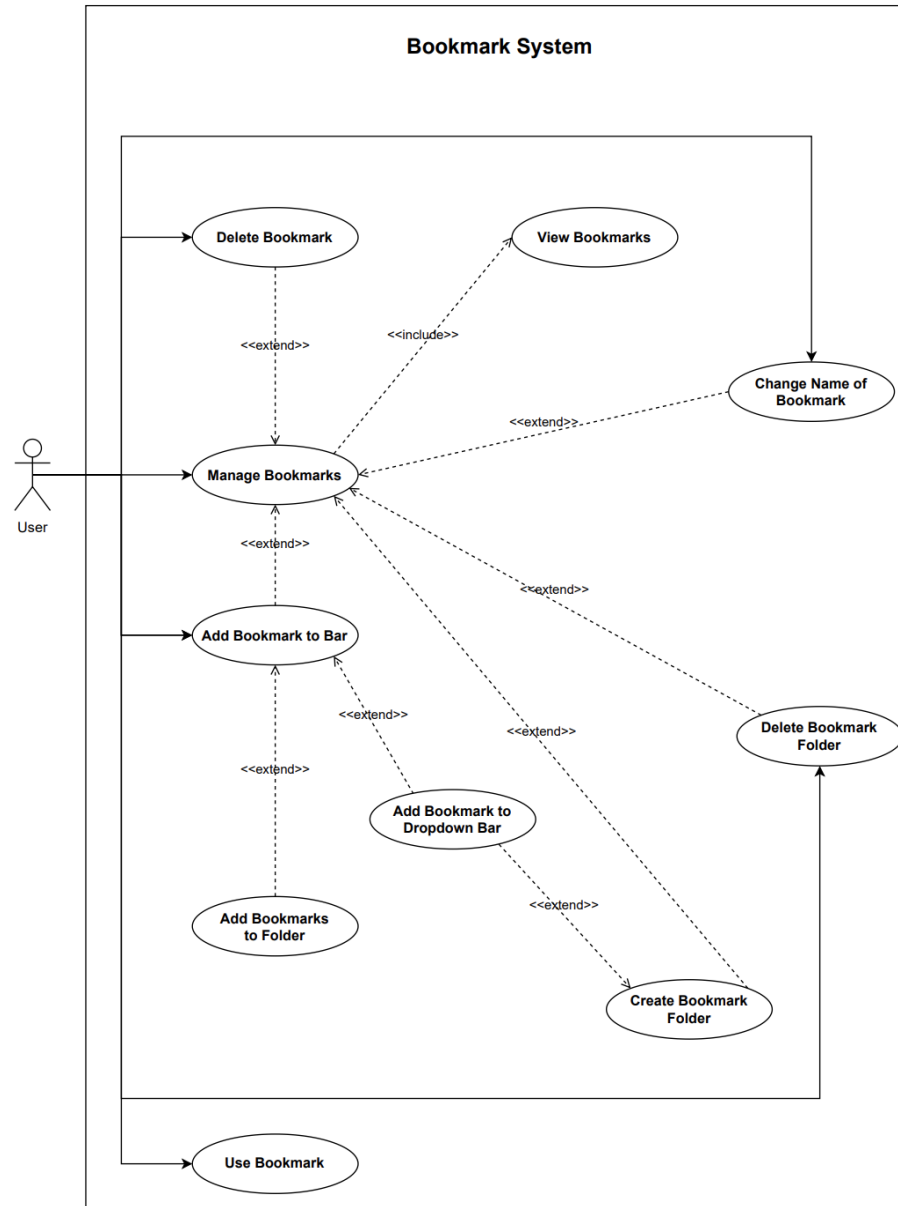
- Cross-Origin-Resource-Sharing
- Access-Control-Allow-Origin
- Prevents access from github to Cloudant

```
✘ Access to XMLHttpRequest at 'http://google.co_index.html:1  
m/' from origin 'null' has been blocked by CORS policy: No  
'Access-Control-Allow-Origin' header is present on the  
requested resource.
```

```
> |
```

CORS SUCKS

Model-based View of System



Demonstration

- Three Scenarios
 - Navigating to a link stored on a bookmark
 - Creating a bookmark
 - Putting a bookmark in a bookmark folder

Using a Bookmark



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Blackboard Learning Management System

My Class My Assignment

My Messages

Courses with messages:

You have no new unread messages!

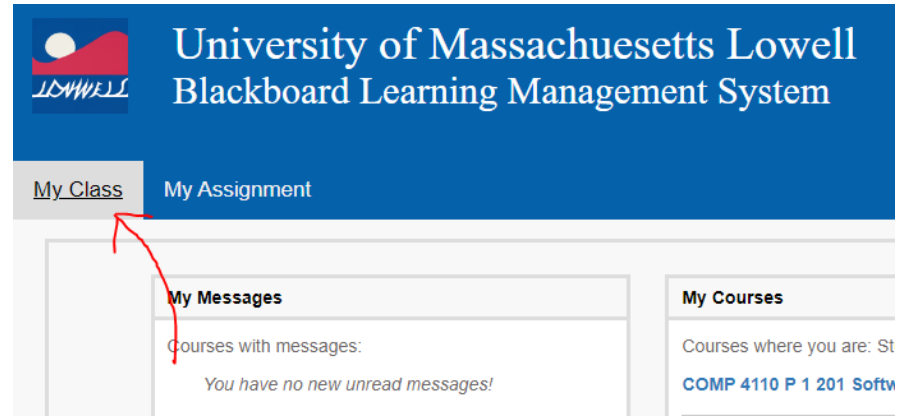
Last Updated: Thursday, November 17, 2022 8:32:31 PM EST

My Courses

Courses

COMP 4

COMP 3



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My Class My Assignment

My Messages

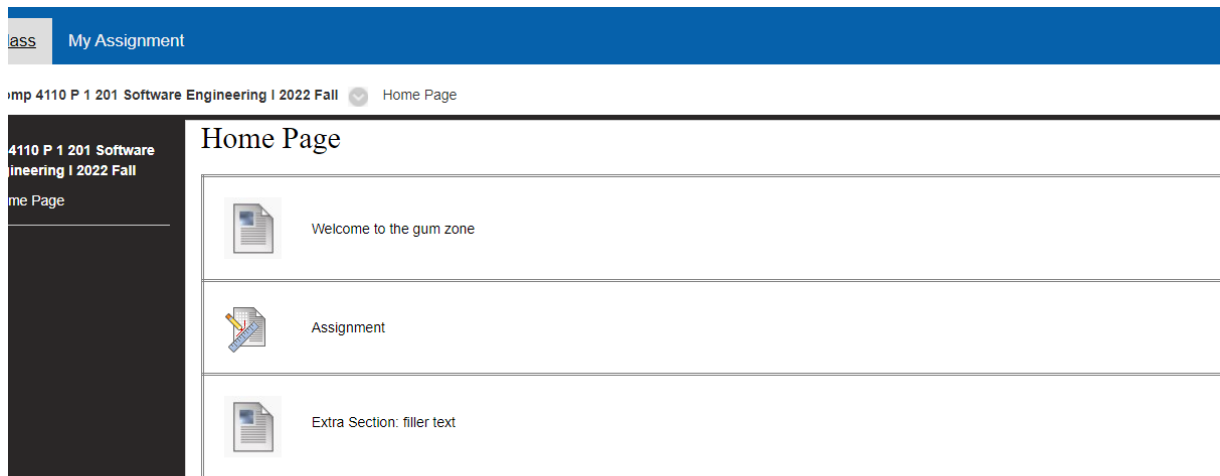
Courses with messages:

You have no new unread messages!

My Courses

Courses where you are: St

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lass My Assignment

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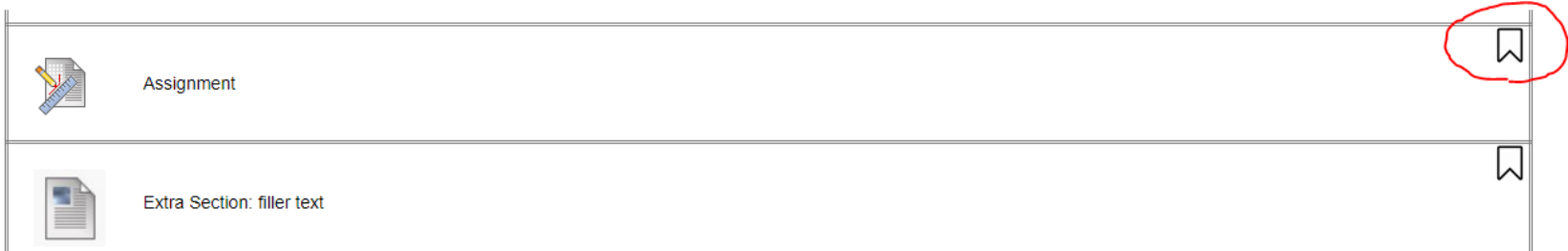
Home Page

Welcome to the gum zone

Assignment

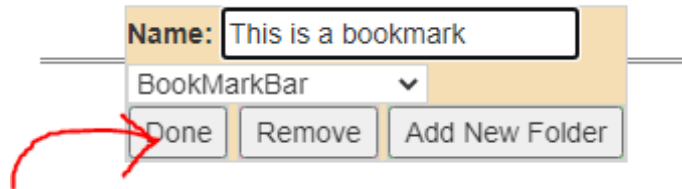
Extra Section: filler text

Creating a Bookmark



Assignment

Extra Section: filler text



Name: This is a bookmark

BookMarkBar

Done Remove Add New Folder

My Class My Assignment This is a bookmark

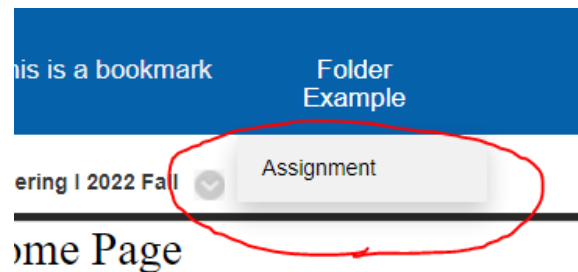
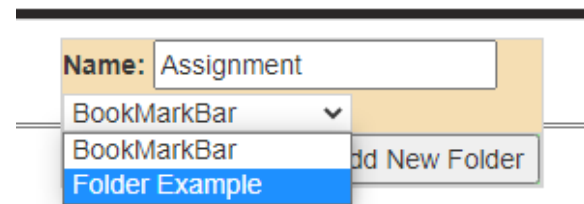
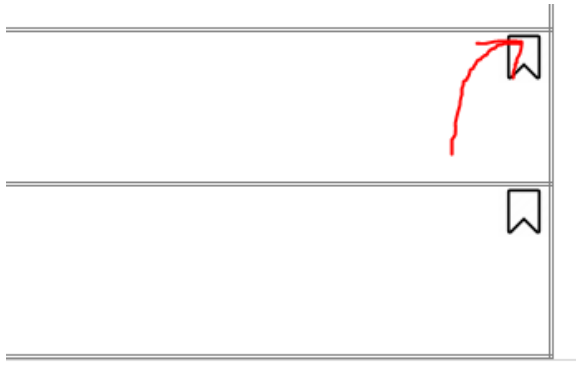
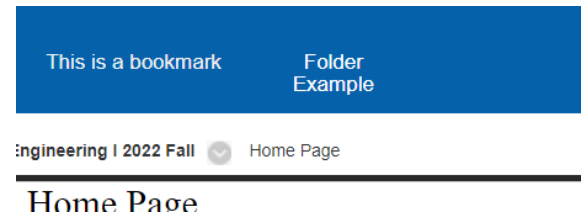
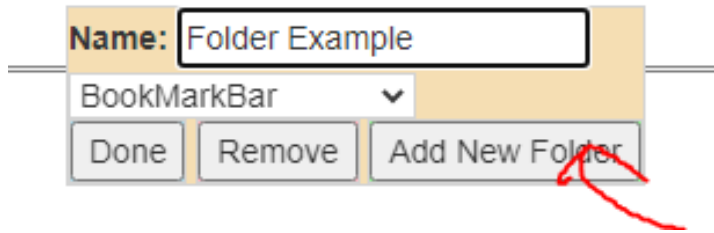
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Home Page



Making a Bookmark Folder



Acknowledgements

- “Teaching & Learning: Online Learning & Teaching Platforms.” *Blackboard*, <https://www.blackboard.com/en-eu/teaching-learning>.
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- “HTTP Get Request in JavaScript?” *Stack Overflow*, <https://stackoverflow.com/questions/247483/http-get-request-in-javascript>.
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- “How Do I Locate Couchdb's Local.ini File so I Can Customize Its Settings?” *Stack Overflow*, 1 Apr. 1961, <https://stackoverflow.com/questions/22176690/how-do-i-locate-couchdbs-local-ini-file-so-i-can-customize-its-settings>.
- “PowerShell Says ‘Execution of Scripts Is Disabled on This System.’” *Stack Overflow*, 1 Dec. 1957, <https://stackoverflow.com/questions/4037939/powershell-says-execution-of-scripts-is-disabled-on-this-system>.
- “Introducing Json.” *JSON*, <https://www.json.org/json-en.html>.