

Collaborative development and publishing of open instructional content with GitHub

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UBC Library Research Commons

A multidisciplinary hub supporting research endeavours, partnerships, and education.

- New team, new approach
- In January 2020
- Working and learning together



"Pre-GitHub"

- Many internal shared folders
- Non-portable & non-reproducible
- Uncoordinated approaches



Disorganized Workflow

File Explorer window showing the directory structure of Research Commons. The address bar indicates the path: This PC > LBRY (\\lead.ubc.ca\team) (T:) > Research Commons >.

The left sidebar shows the navigation pane with the following items:

- Quick access
 - Desktop
 - Downloads
 - Documents
 - Pictures
 - 2020
 - GAA_forms_2020
 - Publishing
 - RC Impact Repo
- OneDrive
- This PC
 - 3D Objects
 - Desktop
 - Documents
 - Downloads
 - Music
 - Pictures
 - Videos
 - OSDisk (C:)
 - Elements (D:)
 - My Passport (F:)
 - allancho (\\files.)
 - LBRY (\\lead.ubc)
- Elements (D:)
- 2018

The main pane displays a list of folders and files:

Name	Date modified	Type	Size
Abacus-Technical_Documentation	09/10/2020 10:42 ...	File folder	
DryadToSPDataverse	01/10/2020 1:17 PM	File folder	
Git	29/09/2020 3:13 PM	File folder	
Abacus-metadata	10/09/2020 1:28 PM	File folder	
Administrative	04/09/2020 1:34 PM	File folder	
maps_project	02/09/2020 2:40 PM	File folder	
Assessment - Data and Stats	27/07/2020 10:10 ...	File folder	
Communications & Signage	24/06/2020 4:53 PM	File folder	
Services (Teams) - Workspace 2.0 for late...	05/06/2020 1:14 PM	File folder	
Temp	02/06/2020 12:02 ...	File folder	
RC Team (Hiring and Staff Info)	20/04/2020 6:18 PM	File folder	
Training	02/04/2020 10:51 AM	File folder	
Workspace 2.0 Files	01/04/2020 10:25 ...	File folder	
Role, Responsibilities & Routines	16/03/2020 3:18 PM	File folder	
Signage	03/03/2020 3:45 PM	File folder	
K4_5 Opening	03/03/2020 3:13 PM	File folder	
Spaces	14/02/2020 3:07 PM	File folder	
RC Team Meetings	28/01/2020 2:34 PM	File folder	
GAA Team Meetings	27/01/2020 12:34 ...	File folder	
Grad Student Workshop Series	24/01/2020 10:46 ...	File folder	
Scheduling	27/09/2019 1:10 PM	File folder	
Planning, Research & Development	23/09/2019 10:04 ...	File folder	
Special Events and Presentations	27/08/2019 11:45 ...	File folder	
Partner Groups	28/02/2019 12:14 ...	File folder	



Proposed New Approach

- Collaborative, using freely available tools accessible outside of the university
- Git, GitHub, Github Pages & Reveal.js
- Presentations through Github Pages



Why GitHub?

- Existing experience on the team with Git and Github
- Already in use by members of the team for similar cases (GIS workshops)
 - This included workshop content in repo and Reveal.js slides via GH Pages



Community inspiration

- Inspiration from the Carpentries' OER model
- Philosophical desire to lower barriers to access and remixing
 - Not a UBC specific platform / approach
 - Content requires only a browser window to access and is downloadable for bad connections



Upskilling

- New team, new desire to upskill and experiment with new workflows
- Goal to better support technical consults



Sustainability

- Text-based approach easy to move, remix, repurpose
- Better ownership, collaboration, and maintenance workflows with growth in size of unit
- Currently, Github Pages is free and unlimited for our use case



The workflow



Setup

- GitHub account for each contributor
- GitHub *organization* for Research Commons



Setup

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Content

- Markdown files
- reveal.js html files



Setup

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Skills

- Markdown (*everyone*)
- Git/GitHub (*everyone*)
- Jekyll themes (*someone*)



From Markdown content...

Introduction to Docker

This workshop is meant to introduce you to the set of virtualization tools referred to as [Docker](<https://www.docker.com/>), which allow you to use, create, and share container images.

![Docker dark background icon](content\figures\docker_boyi_wu.jpg)
Retrieved from [Bo-Yi Wu on Flickr](<https://www.flickr.com/photos/appleboy/>)

[Containers](<https://www.cio.com/article/2924995/what-are-containers-and-why>) create small reproducible computing workspaces on your computer, to which you can ascribe specific libraries and constraints to replicate specific environments.

Workshop Objectives

We'll first discuss broader concepts from the computing virtualization space, disambiguate the many interrelated components of the



Intro to Docker

Participating online

Outline

Part 1 - What's Docker?

- Origins and High Level Concepts
- Main Use Cases
- Disambiguating Docker Terms

Part 2 - Technical Overview

- Paths to installing Docker
- Resources and next steps
- Learning activities

UBC Library Research Commons



...to published
workshop site

Introduction to Docker

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Retrieved from [Bo-Yi Wu on Flickr](#), CC BY 2.0

[Containers](#) create small reproducible computing workspaces on your computer, to which you can ascribe specific libraries and constraints to replicate specific environments.

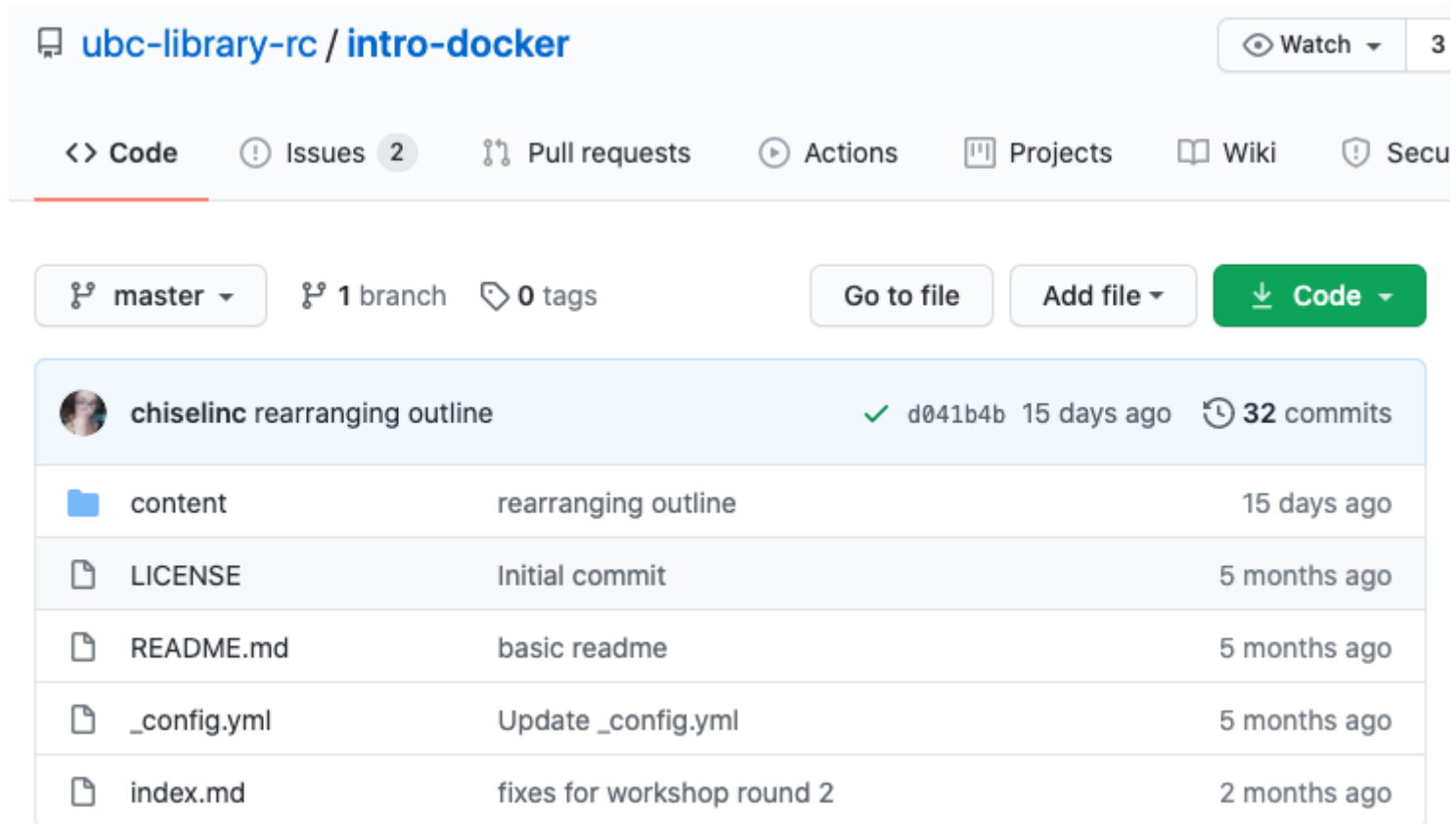
Workshop Objectives

We'll first discuss broader concepts from the computing virtualization space, disambiguate the many interrelated components of the Docker ecosystem, and explore some use cases demonstrating the value of containers in both tech and academia.

Each workshop is a GitHub repo



Each workshop is a GitHub repo



The screenshot shows the GitHub interface for the repository 'ubc-library-rc / intro-docker'. At the top, there's a header with the repository name and a 'Watch' button. Below this is a navigation bar with tabs for 'Code', 'Issues' (2), 'Pull requests', 'Actions', 'Projects', 'Wiki', and 'Security'. The main content area shows the 'master' branch selected, with 1 branch and 0 tags. There are buttons for 'Go to file', 'Add file', and a green 'Code' button. Below this, a commit history table is displayed, showing the latest commit by 'chiselinc' with the message 'rearranging outline' and 32 commits in total. The table lists files and their commit history:

File	Commit Message	Time Ago
content	rearranging outline	15 days ago
LICENSE	Initial commit	5 months ago
README.md	basic readme	5 months ago
_config.yml	Update _config.yml	5 months ago
index.md	fixes for workshop round 2	2 months ago

[Introduction to Docker](#) workshop created by Chelsea Palmer



Each workshop is a GitHub repo

📁 **ubc-library-rc** / **intro-docker**

<> Code

! Issues 2

🔗 Pull requests


🎮 Actions

🔗 master ▾

🔗 1 branch


🏷 0 tags

Go to file

 **chiselinc** rearranging outline ✓ d6

📁 content	rearranging outline
📄 LICENSE	Initial commit
📄 README.md	basic readme
📄 _config.yml	Update _config.yml
📄 index.md	fixes for workshop round 2

intro-docker / **content** /

 **chiselinc** ...

..

📁 figures

📄 activity.md

📄 concepts.md

📄 disambiguation.md

📄 install.md

📄 lesson-plan.md

📄 part-01.md

📄 part-02.md

📄 participating-online.md

📄 resources.md

📄 uses.md



Jekyll theme in its own repo




Jekyll theme in its own repo

📁 ubc-library-rc / rc-workshop-template 👁 Unwatch ▾ 2

<> Code ! Issues 4 🔗 Pull requests 1 🎮 Actions 📁 Projects 📖 Wiki 🛡

🔗 master ▾ Go to file Add file ▾ 📄 Code ▾

 **JeremyBuhler** Delete Gemfile.lock ... ✓ 7 minutes ago 🕒 605

📁 .github	Add publishing workflow (#172)	15 months ago
📁 _includes	fix favicon	18 days ago
📁 _layouts	fix type in footer_content reference	12 days ago
📁 _sass	disable search by default for new repos	18 days ago
📁 assets	logo update	2 months ago
📁 bin	Make spacing consistent	2 years ago



The Research Commons uses a modified version of the [Just the Docs](#) Jekyll theme

Applying theme to workshop sites: **_config.yml**



Applying theme to workshop sites: **_config.yml**

```
1 title: Intro to Docker
2 remote_theme: ubc-library-rc/rc-workshop-template
3 github_repo_url: "https://github.com/ubc-library-rc/intro-d
4
5 # license information for workshop content
6 license_name: "Creative Commons Attribution 4.0 International
7 license_url: "http://creativecommons.org/licenses/by/4.0/"
8 license_image_url: "https://i.creativecommons.org/l/by/4.0/
9
10 # required for building jekyll site locally
11 plugins:
12   - jekyll-remote-theme
13   - jekyll-seo-tag
```



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7 license_url: "http://creativecommons.org/licenses/by/4.0/"
8 license_image_url: "https://i.creativecommons.org/l/by/4.0/
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8 license_image_url: "https://i.creativecommons.org/l/by/4.0/
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10 # required for building jekyll site locally
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```



Instructions and documentation

<https://ubc-library-rc.github.io/rc-workshop-template/>



Getting started

[Copyright checklist](#)

[Publishing slides](#)

[Running locally \(optional\)](#)

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UBC Library Research Commons: workshop template

▼ TABLE OF CONTENTS

- 1 [Set up the RC workshop site](#)
- 2 [Add content pages](#)
 - a [Add child pages](#)
 - b [Exclude a page from navigation menu](#)
- 3 [Selected text formatting options](#)
 - a [Callouts](#)
 - b [Step-by-step instructions](#)
 - c [Terminal input/output](#)
 - d [Code block syntax highlighting](#)
 - e [Circled numbers](#)
 - f [Dropdowns](#)
 - g [Table of contents](#)

Start with the instructions below to setup a Research Commons workshop repository and website. For more customization and configuration options see [Just the Docs](#) documentation.

Set up the RC workshop site

Improvement and maintenance

- **Content Review Tracking** repo for workshop-level
- **GitHub Issues** for specifics
- **Pull requests** for integrating changes



Workshops are reviewed



master

Go to file

Add file

Code

About



JeremyBuhler Copyright review, R workshops ...

13 days ago 21



images

add review guideline notes

2 months ago



README.md

Copyright review, R workshops

13 days ago



review-guidelines.md

added note about suggesting a fix

2 months ago

README.md



Add a new row in the table below for repositories that need a general content review. If the content/workshop is still a work in progress, add a 🚧 next to the workshop title.

A general review should identify areas that need updating due to changing software versions, improvements in clarity, spelling and grammar, etc. Suggested updates should be noted as issues in the source repository. When finished, the reviewer should add their initials and date the review was finished.

Workshop	Last reviewed	Initials	Copyright review
Intro to web maps	July 2020	EF	
Intro to web scraping	August 2020	EF	JB

an open repo for tracking when content reviews of repositories have happened

Readme

Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

Contributors 4



ElizabethFernandes Eliz...



ect123 EvanT




JeremyBuhler



egrguric



Issues are submitted and tagged


 **ubc-library-rc / gis-intro-leaflet**


Unwatch 1


Star 0


Fork 1


<> Code


 **Issues 4**


 Pull requests

 Actions


 Projects

 Wiki

 Security

 Insights

...


Filters 







is:issue is:open

Labels 9

Milestones 0

New issue

 **4 Open** ✓ 13 Closed

<input type="checkbox"/>	Author ▾	Label ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾	
<input type="checkbox"/>		Add block of code to .zip file					 2
	#16 opened on Jul 23 by ElizabethFernandes						
<input type="checkbox"/>		Create vector tile example					
	#6 opened on May 29 by ect123						
<input type="checkbox"/>		Code comments describing code functions	<div>good first issue</div>	<div>help wanted</div>			 1
	#3 opened on May 29 by ect123						
<input type="checkbox"/>		Add final map to index.md					
	#2 opened on Apr 1 by ect123						



Pull requests from students or creators


Import UBC building JSON #1

 Merged **ect123** merged 1 commit into `ect123:master` from `Julix91:patch-1`  on Oct 8, 2019

 Conversation 1

 Commits 1

 Checks 0

 Files changed 1



Julix91 commented on Aug 11, 2019

Contributor



If we're going to use `ubcbuildings` variable in the code, might as well import it rather than copy-paste it manually - to keep things clean.

Here's for people who download the repository - for the main Readme we'd probably want to add it as a separate instruction step, rather than just right into the copy... we'll see.

Also unrelated: Checkout <https://oznogon.com/golarion/#4/55.48/-19.27> - figured you might enjoy it.



Import UBC building JSON ...

Verified

08a8aec



ect123 approved these changes on Oct 8, 2019

[View changes](#)



