

# **Delivering a Better Experience by Using the Open, Collaborative and Flexible Grav CMS – Inside or Outside of your LMS**

**Paul D Hibbitts**  
**hibbittsdesign.org**  
**@hibbittsdesign**



# Topics to Explore Today

1. What is Grav?
2. Grav Open Course Hub Project
3. Other Open-related Grav Projects
4. Next Steps



# What is Grav?



[TOUR](#)[FEATURES](#)[BLOG](#)[DOWNLOADS](#)[ABOUT](#)[FORUM](#)[LEARN](#)

5,158 8,937 1,985

# BUILD FASTER WEBSITES

GRAV IS A MODERN OPEN SOURCE FLAT-FILE CMS

[GET GRAV](#)

STABLE VERSION 1.4.3 **NEW!** UPDATED 3 WEEKS AGO • [CHANGELOG](#)



# WHY CHOOSE GRAV?

Voted "Best Open Source CMS" in 2016



Voted "Best Flat File CMS" in 2017



Fast



Extensible



Open Source

Performance is not just an afterthought, we baked it in from the start

Grav has a powerful API and sophisticated Package Manager to make it super flexible

Grav is Open Source, and all the code is available on [GitHub.com](#)

# Grav Highlights

- File-based
  - Fast performance (esp. smaller sites), simplicity, portability and generally more secure
  - File-based content also naturally supports version control
  - Grav can also be a front-end for any collaborative Git repository
- Markdown
  - A platform-independent format perfect for writing and the 5Rs

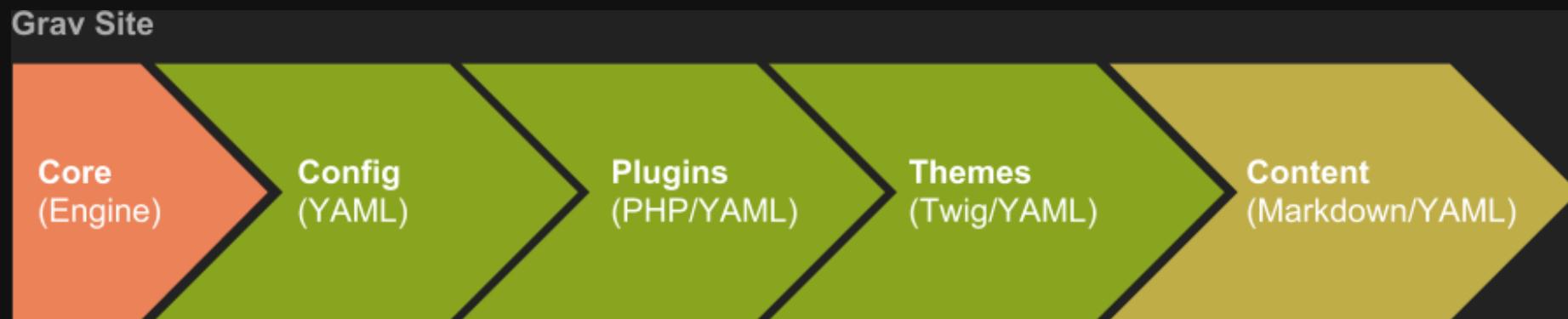


# Grav Highlights

- Modular
  - Modular content is possible, along with custom content types
- Workflow
  - Supports an efficient edit and publish workflow (esp. Git-based)
- Customization
  - Powerful Blueprints supports Admin Panel customizations



# Grav's Layered Conceptual Design



# Open Course Hub Project



# Grav Open Course Hub

Built using Grav, Open Course Hub with Git Sync is designed to give tech-savvy educators an open, collaborative and flexible platform that they can partner with their current LMS



# Grav Open Course Hub

- Streamlined setup and configuration (incl. Git Sync)
- Supports open and collaborative content (via Git repository)
- Theme files synced to Git repository for collaborative authoring/assistance
- Example course hubs (incl. basic, intermediate. and advanced)
- Includes custom content type pages and Shortcodes (i.e. Embed.ly Web page preview cards, H5P and Swipe)
- Fully customizable Sidebar using Markdown or HTML



CPT-363

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Important Reminders  
✓ Usability inspection peer reviews due Oct 17th

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Some Name  
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Another Name  
anothername@somewhere.edu

Canvas LMS  
Calendar  
Assignments  
Quizzes  
Class Discussions  
Grades  
[Syllabus](#)

Oct 4th Class Preparations

Required Reading  
A Five-Step Process For Conducting User Research

Required Reading Quiz

Slides to be Discussed  
User Research

Did you attend this class? Share your one-minute summary before midnight, the day of class.

Week 4 (Sep 27 - Oct 3)

Presented Slides  
User Interface Inspections  
[View all of Week 4 \(Sep 27 - Oct 3\) >](#)

Week 3 (Sep 20 - 26)

Presented Slides  
Strategic UX Design  
[View all of Week 3 \(Sep 20 - 26\) >](#)

Week 2 (Sep 13 - 19)

Presented Slides  
The Process of UX Design  
[View all of Week 2 \(Sep 13 - 19\) >](#)

Web Pick of the Week

NIELSEN NORMAN GROUP  
How Effective UX Teams Generate Ideas

Ideation processes can vary widely – from how many people are involved to how many techniques are used. To get an understanding of how ideation is commonly approached, what the challenges are, and what methods are perceived as most effective, we surveyed 257 UX-related professionals in a range of roles, including UX designers, developers, content strategists, visual designers, and product managers.

[Read the article on nngroup.com >](#)

Twitter Feed

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A Twitter list by @ribbitdesign

Luke Wroblewski  
robots will take our jobs.  


Rosenfeld Media

Embed View on Twitter

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< 1 2 >

Built with Grav CMS  
Course Hub package by hubdesign.org  
[ GitPitch @ gitpitch.io | design/gitpitch ]



## Important Reminders

- ✓ Usability inspection peer reviews due Oct 17th



## Oct 4th Class Preparations

Required Reading

[A Five-Step Process For Conducting User Research](#)

[Required Reading Quiz](#)

Slides to be Discussed

[User Research](#)

Did you attend this class? [Share your one-minute summary before midnight, the day of class.](#)

 [Week 4 \(Sep 27 - Oct 3\)](#)



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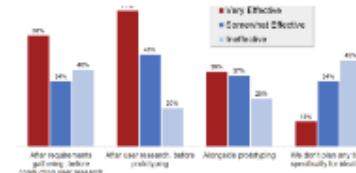
[Grades](#)

[Syllabus](#)

Web Pick of the Week

**NN NIELSEN NORMAN GROUP**

When does ideation typically occur in your team's design process?



[nngroup.com](http://nngroup.com)

NN/g

Ideation in Practice:  
How Effective UX Teams Generate Ideas

## Ideation in Practice: How Effective UX Teams Generate Ideas

Ideation processes can vary widely - from how many people are involved to what techniques are used. To get an understanding of how ideation is commonly approached, what the challenges are, and what methods are

# Oct 4th Class Preparations

## Required Reading

### A Five-Step Process For Conducting User Research

#### Required Reading Quiz

Slides to be Discussed

### User Research

Did you attend this class? [Share your one-minute summary before midnight, the day of class.](#)

## Week 4 (Sep 27 - Oct 3)



Presented Slides

### User Interface Inspections

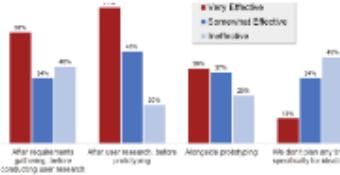
[View all of Week 4 \(Sep 27 - Oct 3\) >](#)

## Syllabus

## Web Pick of the Week

### NN NIELSEN NORMAN GROUP

When does ideation typically occur in your team's design process?



nngroup.com  
NN/g Ideation in Practice:  
How Effective UX Teams Generate Ideas

## Ideation in Practice: How Effective UX Teams Generate Ideas

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[Read the article on nngroup.com >](#)

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## Twitter Feed

### CPT-363

A Twitter list by @hibbittsdesign

Laura Klein Retweeted

Adrian Howard  
@adrianh

## Week 3 (Sep 20 - 26)



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Week 4 (Sep 27 - Oct 3)

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Summaries and Questions  
Sep 27th Class One-minute Summaries

Presented Slides  
User Interface Inspections (Download slides as PDF)

Slides Placeholder

CPT 363

"A work in progress. And the possibilities are endless."  
— Elizabeth Eulberg

swipe View ↗

Supplemental Materials

Lecture 4.2 Design Heuristics (Part 1/3)  
DESIGN PRINCIPLES

Heuristics part 1

Scott Klemmer  
UC San Diego

Usability Inspection (Peer Reviews Required for Grade)  
Usability Inspection Report Template

Required Reading

UXMATTERS

An Overview of Expert Heuristic Evaluations

When experts conduct heuristic evaluations... they do not usually attempt to map user interface problems directly to specific heuristics because the mapping of problems to heuristics is typically many-to-many, convoluted, and multidimensional. When experts conduct heuristic evaluations, particularly outside academic contexts—they do not usually attempt to map user interface problems directly to specific heuristics because the mapping of problems to heuristics is typically many-to-many, convoluted, and multidimensional.

Read the article on uxmatters.com >

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Quick Quiz

A heuristic evaluation is a task-based walkthrough of a user interface.

True  False

Check

Download Embed 109

◀ Previous Next ▶

Web Pick of the Week

NIELSEN NORMAN GROUP

When does ideation typically occur in your team's design process?

Read the article on nngroup.com >

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Twitter Feed

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A Twitter list by @habitsdesign

Laura Klein Retweeted

Adrian Howard  
Designer

We've all had that kind of day bair. Don't worry. It'll be all right.

Laura Klein Retweeted

Anita Sarkeesian  
Historian

The bullshit sexist gatekeeping that works to block women from traditionally male dominated sports whether as players, coaches or otherwise is just plain wrong and repressive. Read this article by [Anita](#) then hire and recruit all the goddamn women! [theplayerstribune.com/en-united...](#)

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Built with Grav CMS  
Course Hub powered by habitsdesign.org  
[ GitPitch @ gitpitch.com by habitsdesign.org | design/gitpitch ]

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Administrator

git

Dashboard

Configuration

Pages 26

Plugins 20

Themes 3

Tools

Logout



Content

Options

Advanced

Blog Item

Normal

Expert

Title

Week 4 (Sep 27 - Oct 3)



## ##### Presented Slides

[\[User Interface Inspections\]](https://swipe.to/9967fp)(https://swipe.to/9967fp)

---

## ##### Summaries and Questions

[\[Sep 27th Class One-minute Summaries\]](https://canvas.sfu.ca/courses/36662/assignments/267535)(https://canvas.sfu.ca/courses/36662/assignments/267535)

## ##### Presented Slides

User Interface Inspections ([Download slides as PDF](#)(#))

```
<div class="embed-responsive embed-responsive-16by9"><figure><iframe src="https://www.swipe.to/embed/9967fp" allowfullscreen></iframe></figure></div>
```

Page Media





Paulhibbitts  
Administrator



git



Dashboard



Configuration



Pages

26



Plugins

20



Themes

3



Tools



Logout



Add Filters

Search Pages



Expand All

Collapse All

Home

/home → blog



Schedule

/schedule → sidebarpage



Resources

/resources → sidebarpage



Syllabus

/syllabus → fullwidthpage



Read Me

/readme → fullwidthpage



Footer

/footer → default



Header Image

/headerimage → default



Mini Homepage for Embedding

/mini-home → fullwidthpage



Sidebar

/sidebar → default



Web Pick of the Week

/webpage-card → embedlycard



## Add Blog Item

Blog Item Title \*

Parent Page

--> Home



Continue



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git



Dashboard



Configuration



Pages

26



Plugins

20



Themes

3



Tools



Logout

Content

Options

Advanced

Blog Item

Normal

Expert

Title

My New Blog Item



Your page summary goes here.

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Your page content goes here.

NOTE: You cannot add media files until you save the page. Just click 'Save' on top

# CPT-363

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## Resources

### Reflective Writing Guides

- A short guide to reflective writing
- Online Guide to Reflective Writing
- Reflective Toolbox

### UX Platform Guideline Collections

- Android User Interface Design Guidelines
- Google Material Design Guidelines
- iOS Human Interface Design Guidelines (iPhone and iPad)
- KDE Human Interface Design Guidelines
- OS X Human Interface Design Guidelines
- Windows App Design Guidelines (Touch)

### UX Templates

- Contextual Interview Form
- One Page User Research Plan
- Templates & Downloadable Documents | Usability.gov
- UXpatterns | Resources
- The PM Toolkit
- UX Project Checklist

### UX Design Checklists

- A Checklist for Designing Mobile Input Fields
- Mobile UX Checklist (PDF, by Mobify)
- One-Page Touch Interaction Design Checklist (PDF)
- Usability checklist (Userium)
- UX Project Checklist

### UX Technique Collections

- Methods | Usability.gov
- Methods | Usability Body of Knowledge
- Usability Planner
- UX Techniques (by UX Mastery)

### UX Article Collections

- The UX Bookmark
- User Experience Magazine (UXPA)
- UI/UX Articles (Medium)

### UX eBooks

- 50 UX Best Practices by Above the Fold (email address required)
- Bright Ideas for User Experience Designers
- The Fable of the User-Centered Designer

### UX Design MOOCs & Courses

- Human-Computer Interaction | Coursera
- The Design of Everyday Things | Udacity
- Rapid Wireframing: Finding the Right Product Design

### UX Podcast Collections

- Design Critique: Products for People
- Podcasts - UIE Brain Sparks
- Boagworld Podcast
- User Experience Podcast

### UX Video Collections

- Google Developers Channel
- Interaction Design Association Vimeo Channels
- Paul's YouTube Playlists
- Paul's Vimeo Channel

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### Canvas LMS

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### Web Pick of the Week

NIELSEN NORMAN GROUP

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Read the article on nngroup.com >

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### Twitter Feed

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A Twitter list by @rabbitsdesign

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Laura Klein Retweeted  
Anita Sarkeesian  
The bullish sexist gatekeeping that works to block women from traditionally male dominated spaces is so common and so familiar - otherwise is infuriating and tired and repressive. Read this article by @paugast then hire and recruit all the goddamn women! theplayerstribune.com/en-us/articles...

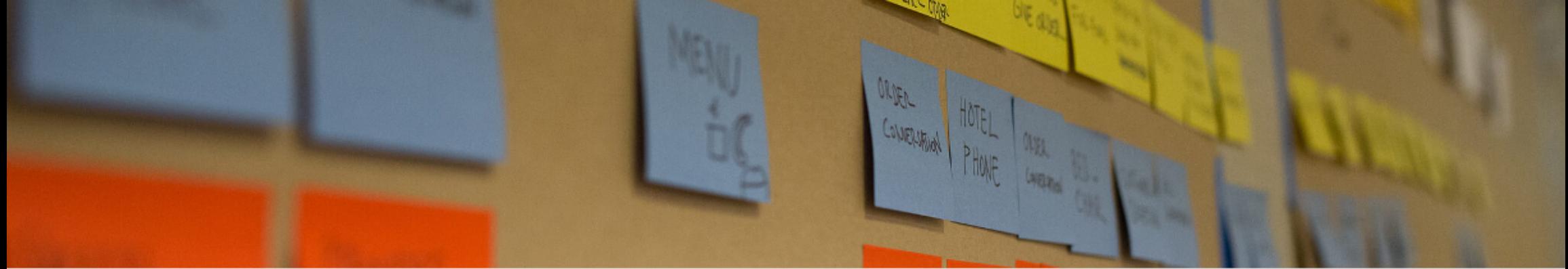
AN OPEN LETTER ABOUT

Embed View on Twitter

Built with Grav CMS  
Course Hub package by hilbittsdesign.org

[ GitPitch @github/hilbitts-design/gitpitch ]





## Resources

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- [Templates & Downloadable Documents | Usability.gov](#)
- [cxpartners | Resources](#)
- [The PM Toolkit](#)

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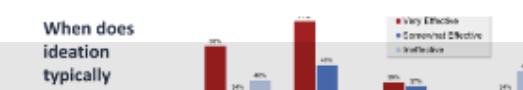
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Web Pick of the Week

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grav-skeleton-course-hub-site / pages / 03.resources / sidebarpage.md

[Edit](#) or cancel[Edit file](#)[Preview changes](#)

Spaces

2

Soft wrap

```
1 ---  
2 title: Resources  
3 published: true  
4 ---  
5  
6 ##### Reflective Writing Guides  
7 * [A short guide to reflective writing](https://intranet.birmingham.ac.uk/as/libraryservices/library/skills/asc/documents/public/Short-Guide-Reflective-Writing.pdf)  
8 * [Online Guide to Reflective Writing](https://nile.northampton.ac.uk/bbcswebdav/pid-1244383-dt-content-rid-3278540_1/courses/Centre-for-Achievement-and-Performance/Skills/Reflective%20Writing/Reflective%20Writing%20-%20Feb%202017.pdf)  
9 * [Reflective Toolbox](http://writeonline.ca/media/documents/ReflectiveToolbox.pdf)  
10  
11 ##### UX Platform Guideline Collections  
12 * [Android User Interface Design Guidelines](https://developer.android.com/guide/practices/ui_guidelines/index.html)  
13 * [Google Material Design Guidelines](https://material.google.com/)  
14 * [iOS Human Interface Design Guidelines (iPhone and iPad)](https://developer.apple.com/ios/human-interface-guidelines/)  
15 * [KDE Human Interface Design Guidelines](https://community.kde.org/KDE_Visual_Design_Group/HIG)  
16 * [OS X Human Interface Design Guidelines](https://developer.apple.com/library/mac/documentation/UserExperience/Conceptual/OSXHIGuidelines/index.html#/apple_ref/doc/uid/TP40002720-TPXREF101)  
17 * [Windows App Design Guidelines (Touch)](https://msdn.microsoft.com/en-us/library/dn742468.aspx)  
18  
19 ##### UX Templates  
20 * [Contextual Interview Form](http://userfocus.co.uk/pdf/cisheet.pdf)  
21 * [One Page User Research Plan](https://www.smashingmagazine.com/2012/01/ux-research-plan-stakeholders-love/)  
22 * [Templates & Downloadable Documents | Usability.gov](http://www.usability.gov/how-to-and-tools/resources/templates.html)  
23 * [cxpartners | Resources](http://www.cxpartners.co.uk/ux-resources/)  
24 * [The PM Toolkit](http://thepmtoolkit.com/)
```



# What Skills are Required?

- Intended for “Tech-savvy” educators:
  - Code editor usage (e.g. Atom or Brackets)
  - Markdown or HTML basics
  - Understanding folder hierarchies (i.e. relative links)
  - Web server access
  - GitHub working knowledge (recommended)



# **Grav Open Course Hub is Intended for Tech-savvy Educators who Value:**

- Controllability
- Flexibility
- Portability
- Efficiency
- Openness
- Participation





Course Participants



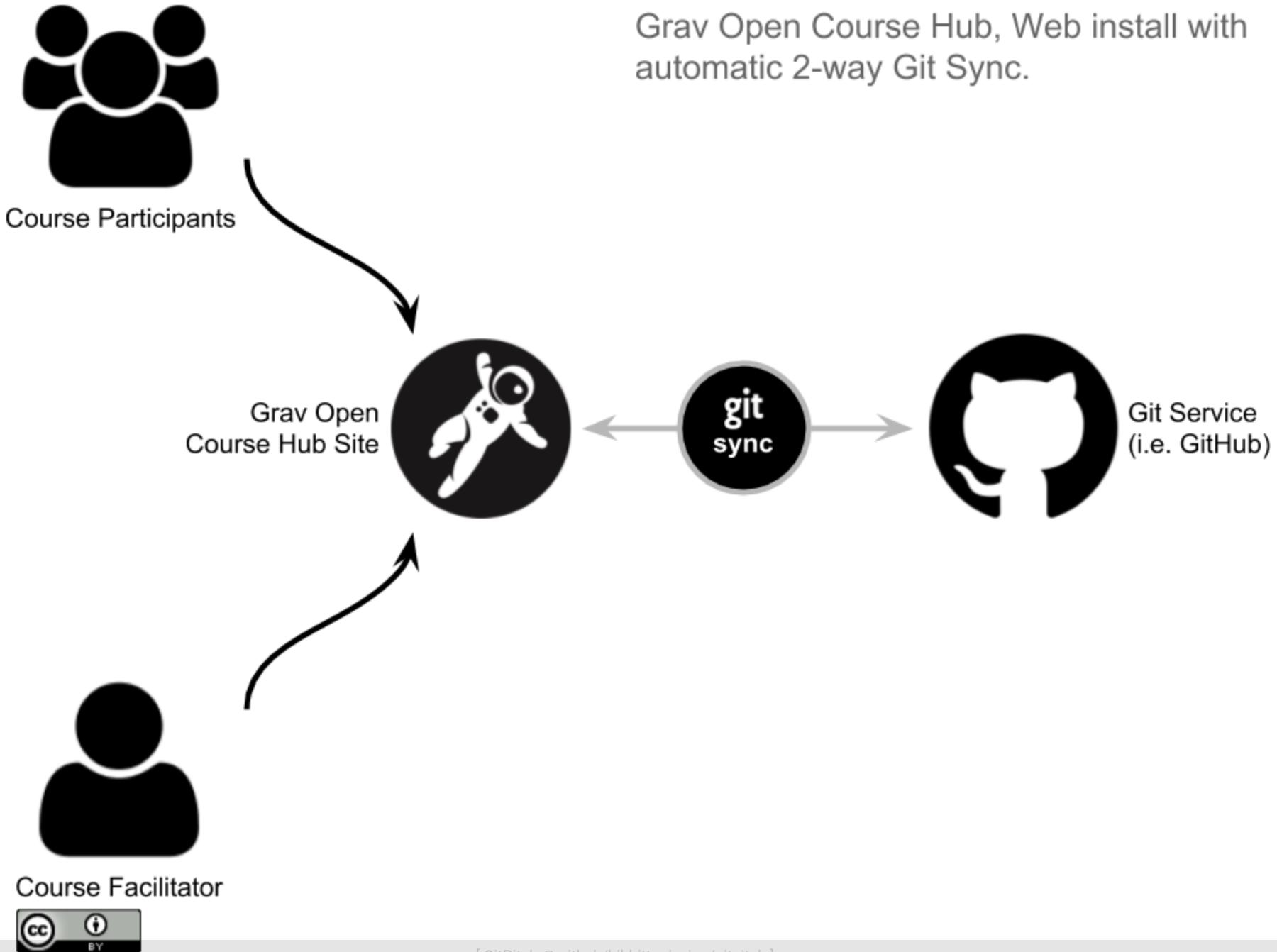
Course Facilitator

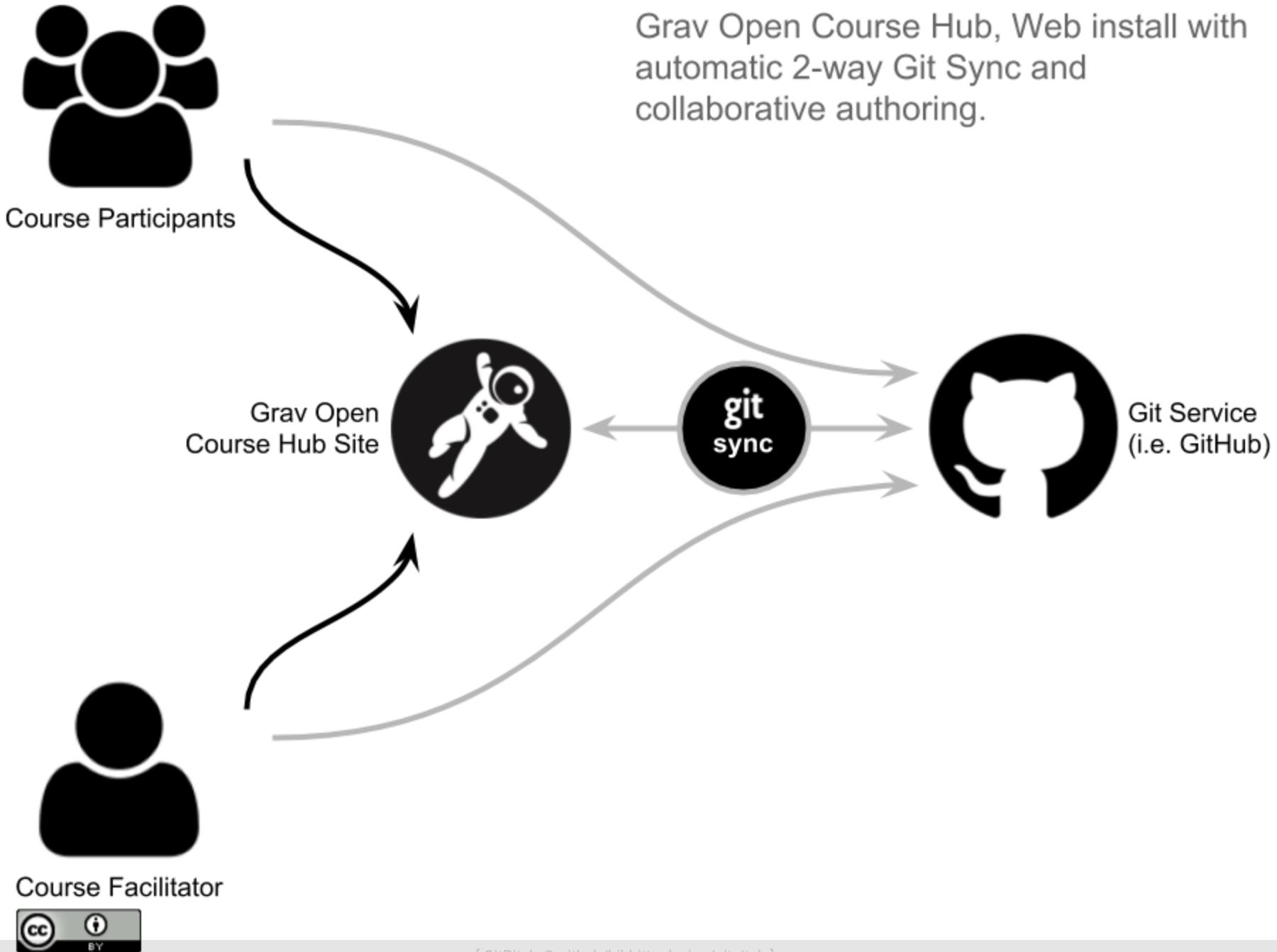


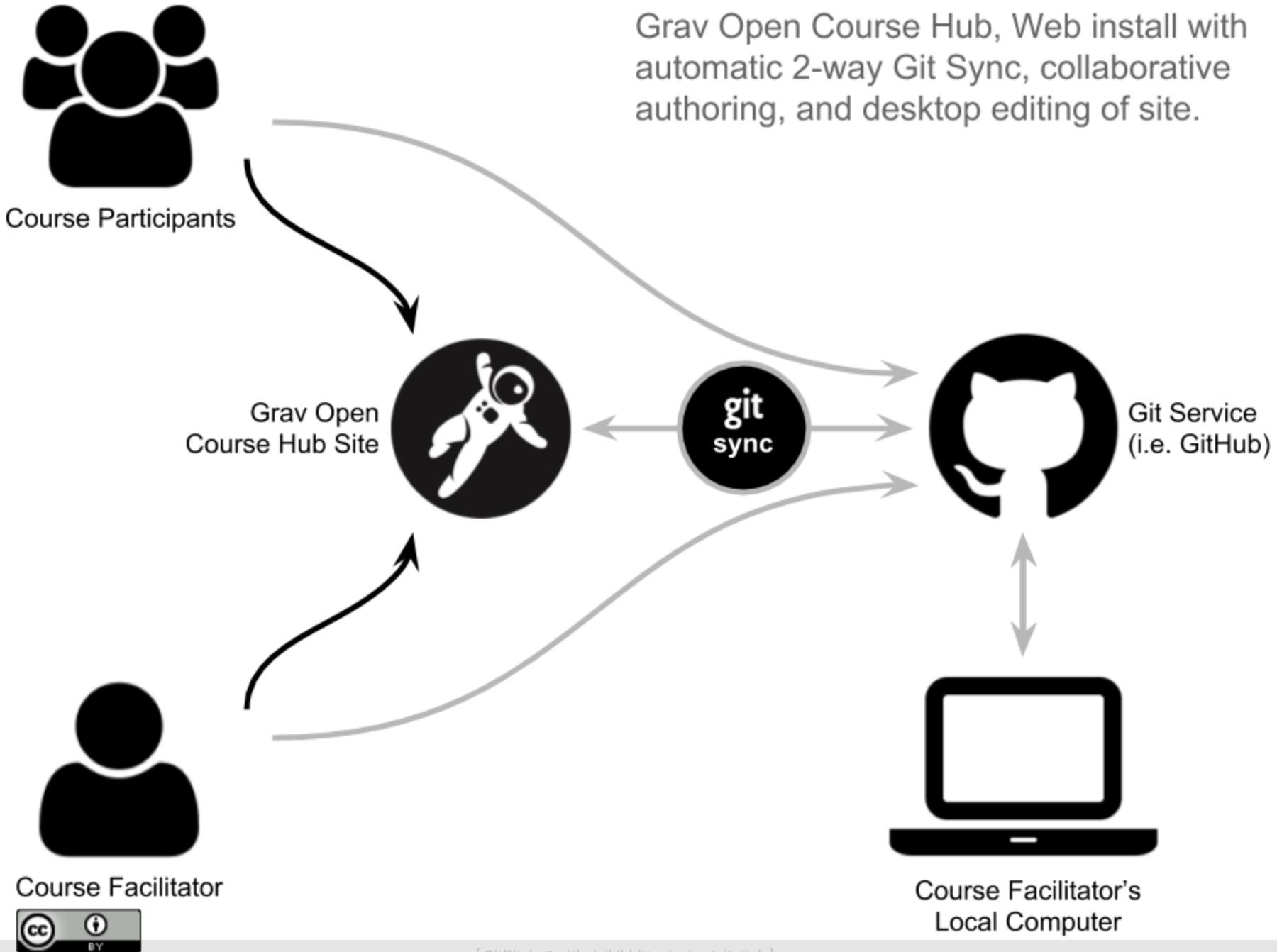
Grav Open Course Hub, Web install.

Grav Open  
Course Hub Site









# Problems the Course Hub Tackles



# What are Users Saying?



*"The Open Course Hub was easy to set up and get running and my students loved having a one-stop place to go to for their course content. I really love that it syncs with GitHub so easily and seamlessly. I was able to have an open, collaborative, easily updatable, fully version-controlled site up and running in little time, with fairly modest technical skills. On the student side, it is all beautiful and easy to use on any device!" -- Mark Coster (Associate Professor at Griffith University, Australia)*



# Enough Talk, Demo Time!

**[demo.hibbittsdesign.org/cmpt-363-173/](http://demo.hibbittsdesign.org/cmpt-363-173/)**



**Wait, What about *Inside* of  
an LMS?**

**[canvas.sfu.ca/courses/35900](https://canvas.sfu.ca/courses/35900)**



# What About Other Open-related Grav Projects?



# More Open-related Grav Projects

- Open Publishing Space
  - Share and collaboratively edit Markdown-based OER
- Learn2 with Git Sync
  - Share and collaboratively edit Markdown-based documentation
- H5P Shortcode
  - Display H5P.org and locally store H5P content
- Hypothesis Plugin
  - Display the Hypothesis sidebar on your Grav site



# Open Publishing Space



# Learn2 with Git Sync



# H5P Shortcode

```
[h5p id="712"]  
[h5p url="https://h5p.org/h5p/embed/712"]
```



What color does the blackcurrant berry actually have?

Black

Blue

Very dark purple

 Check

 Download

 Rights of use

 Embed

 H5P



# Hypothesis Plugin



# Next Steps



# Things to Explore Next

Grav CMS Official Site

[getgrav.org](http://getgrav.org)

Markdown

[Learn the basics of Markdown in ten minutes](#)

GitHub Workflow

[Introduction - Git and GitHub for Poets](#)

GitHub Desktop App



# ⚠ Pop Quiz ⚠

Which of these “tech-savvy” skills concern you the most?

- Text editor usage (e.g. Atom or Brackets)
- Markdown or HTML basics
- Understanding folder hierarchies (i.e. relative links)
- Web server access
- GitHub or GitLab working knowledge
- GitHub Desktop App (not needed if using Atom)



# ★ Thank you. Q&A Time! ★

## Contact Info

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Twitter: [@hibbittsdesign](https://twitter.com/@hibbittsdesign)

Email: [paul@hibbittsdesign.org](mailto:paul@hibbittsdesign.org)

## Grav Open Course Hub

Docs: [learn.hibbittsdesign.org/coursehub](http://learn.hibbittsdesign.org/coursehub)

Canvas Demo:

[demo.hibbittsdesign.org/canvascoursehub](http://demo.hibbittsdesign.org/canvascoursehub)

Moodle Demo:

[demo.hibbittsdesign.org/moodlecoursehub](http://demo.hibbittsdesign.org/moodlecoursehub)

