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?

GRAV

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

Grav Site

| Core (Engine) | Config (YAML) | Plugins (PHP/YAML) | Themes (Twig/YAML) | Content (Markdown/YAML) |

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

RESOURCES   SYLLABUS   READ ME   ⚙ EDIT THIS PAGE
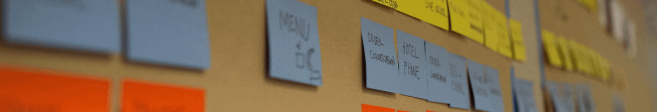
Important Reminders
✓ Usability inspection peer reviews due Oct 17th

Oct 4th Class Preparations

Required Reading
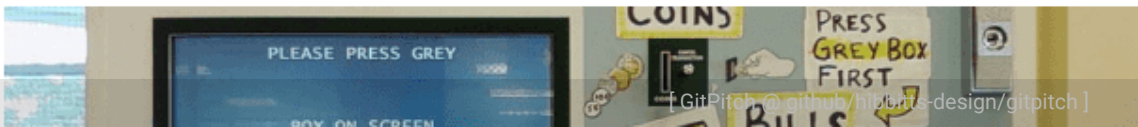A Five-Step Process For Conducting User Research

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)**

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) ❯

« 1 2 »

Course Facilitators
Some Name
somename@somewhere.edu
Office hours Mon. 4:00-5:15pm
Harbour Centre 2146

Another Name
anothername@somewhere.edu

Canvas LMS
Calendar
Assignments
Quizzes
Class Discussions
Grades
Syllabus

Web Pick of the Week

NN/g NIELSEN NORMAN GROUP

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 perceived as 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 ❯

powered by embedly

Twitter Feed

CPT-363
A Twitter list by @hibbittsdesign

Luke Wroblewski
@lukew
robots will take our jobs.

[img caption: San Jose welcome robot welcomes wall to the airport]

Rosenfeld Media

Embed   View on Twitter

Subscribe
Atom 1.0   RSS

Built with Grav CMS
Course Hub package by hibbittsdesign.org

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)

Course Facilitators

Some Name
somename@somewhere.edu
Office hours Mon. 4:00-5:15pm
Harbour Centre 2146

Another Name
anothername@somewhere.edu

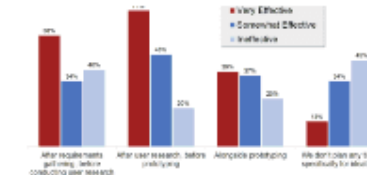Canvas LMS

Calendar

Assignments

Quizzes

Class Discussions

Grades

Syllabus

Web Pick of the Week

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)

Image: Rick Dolishny, Flickr.com

Presented Slides

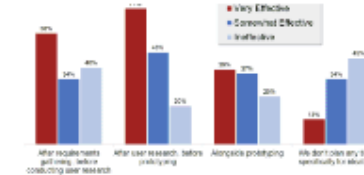User Interface Inspections

View all of Week 4 (Sep 27 - Oct 3) ❯

📅 Week 3 (Sep 20 - 26)

Web Pick of the Week

NIELSEN NORMAN GROUP

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 perceived as effective, we surveyed 257 UX-related professionals in a range of roles, including UX designers, developers, content strategists, visual designers, and product managers.

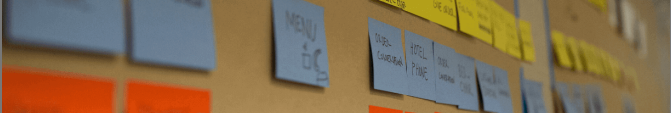Read the article on nngroup.com >

powered by embedly

Twitter Feed

CPT-363

A Twitter list by @hibbittsdesign

🔁 Laura Klein Retweeted

Adrian Howard
@adrianh

CPT-363

RESOURCES   SYLLABUS   READ ME   ⚙ EDIT THIS PAGE

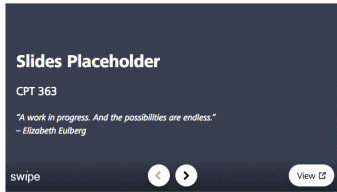## 📅 Week 4 (Sep 27 - Oct 3)

Image: Rick Dotshiny, Flickr.com

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
The Design Lab

Assignments

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 >

powered by embedly

Quick Quiz

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

○ True   ○ False

✓ Check

⬇ Download   </> Embed   H5P

‹ Previous   Next ›

Course Facilitators

Some Name
somename@somewhere.edu
Office hours Mon. 4:00-5:15pm
Harbour Centre 2146

Another Name
anothername@somewhere.edu

Canvas LMS

Calendar
Assignments
Quizzes
Class Discussions
Grades
Syllabus

Web Pick of the Week

NIELSEN NORMAN GROUP

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

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 perceived as effective, we surveyed 257 UX-related professionals in a range of roles, including UX designers, developers, content strategists, visual designers, and product managers.
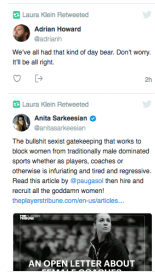
Read the article on nngroup.com >

powered by embedly

Twitter Feed

CPT-363
A Twitter list by @hibbittsdesign

Laura Klein Retweeted
Adrian Howard
@adrianh
We've all had that kind of day bear. Don't worry. It'll be all right.
♡ ↗ 2h

Laura Klein Retweeted
Anita Sarkeesian ✓
@anitasarkeesian
The bullish sexist gatekeeping that works to block women from traditionally male dominated sports whether as players, coaches or otherwise is infuriating and tired and regressive. Read this article by @psugasol 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 hibbittsdesign.org

GRAV

Week 4 (Sep 27 - Oct 3)

Add ▾ | Copy | Move | Delete | Save

Paulhibbitts
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)

H ▾ B I S — 🔗 🖼 99 ☰ ☰ ▶ H5P </> 👁 ⤢

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

===

Summaries and Questions
[Sep 27th Class One-minute Summaries](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
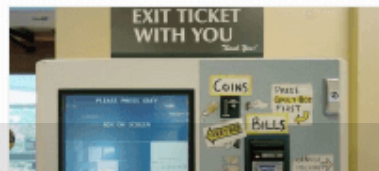
EXIT TICKET
WITH YOU

GRAV ⤴

📄 Manage Pages

↩ Back ➕ Add Blog Item ➕ Add Page with Sidebar ➕ Add ▾

Paulhibbitts
Administrator

🗑 **git**
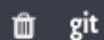
⚏ Dashboard

🔧 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

Page Legend: ⭕ Visible ⭕ Non-Routable ⭕ Non-Visible ⭕ Modular

GRAV

Add Blog Item

Blog Item Title *

My New Blog Item

Parent Page

—⊷ Home ⌄

Continue

GRAV

Paulhibbitts
Administrator

- 🗑 **git**
- ▦ **Dashboard**
- 🔧 **Configuration**
- 📄 **Pages**   26
- 🔌 **Plugins**   20
- 💧 **Themes**   3
- 💼 **Tools**
- ↪ **Logout**

📄 My New Blog Item

↩ ‹ ✔ **Save**

| Content | Options | Advanced | Blog Item | Normal | Expert |

Title

My New Blog Item

↺   ↻   **H** ▾   **B**   *I*   S̶   ━   🔗   🖼   99   ☰   ☷   ▶   **H5P**   </>   👁   ⤢

```
Your page summary goes here.

===

Your page content goes here.
```

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

Grav v1.4.3 - Admin v1.7.4 - was made with ♡ by Trilby Media.

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
- cxpartners | 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
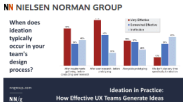- Podcasts - UIE Brain Sparks
- Boagworld Podcast
- User Experience Podcast

UX Video Collections

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

Course Facilitators

Some Name
somename@somewhere.edu
Office hours Mon. 4:00-5:15pm
Harbour Centre 2146

Another Name
anothername@somewhere.edu

Canvas LMS
- Calendar
- Assignments
- Quizzes
- Class Discussions
- Grades
- Syllabus

Web Pick of the Week

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 perceived as 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 >

powered by embedly

Twitter Feed

Built with Grav CMS
Course Hub package by hibbittsdesign.org
[GitPitch @ github/hibbitts-design/gitpitch]   20 / 46

CPT-363

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
- cxpartners | Resources
- The PM Toolkit

Course Facilitators

Some Name
somename@somewhere.edu
Office hours Mon. 4:00-5:15pm
Harbour Centre 2146

Another Name
anothername@somewhere.edu

Canvas LMS

Calendar
Assignments
Quizzes
Class Discussions
Grades
Syllabus

Web Pick of the Week

NN NIELSEN NORMAN GROUP

paulhibbitts / **grav-skeleton-course-hub-site**

Unwatch ▾ 1   ★ Star 0   Fork 0

<> Code   Issues 0   Pull requests 0   Projects 0   Wiki   Insights   Settings

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

Project

- ▼ grav-skeleton-course-hub-site
  - ▼ pages
    - ▶ 01.home
    - ▶ 02.schedule
    - ▼ 03.resources
      - sidebarpage.md
    - ▶ 10.syllabus
    - ▶ 20.readme
    - ▶ footer
    - ▶ headerimage
    - ▶ mini-home
    - ▶ sidebar
    - ▶ webpage-card
  - ▶ themes
  - README.md

sidebarpage.md

```
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/libra
   ry/skills/asc/documents/public/Short-Guide-Reflective-Writing.pdf)
8  *   [Online Guide to Reflective
   Writing](https://nile.northampton.ac.uk/bbcswebdav/pid-1244383-dt-c
   ontent-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.pd
   f)
10
11 #### UX Platform Guideline Collections
12 *   [Android User Interface Design
   Guidelines](https://developer.android.com/guide/practices/ui_guidel
   ines/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/U
   serExperience/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
```

⊙ Git

☰ Unstaged Changes

No changes

✓ Staged Changes

No changes

Commit message

Commit to master   72

(Grav GitSync) Automatic Com... Undo 2d
(Grav GitSync) Automatic Commit from... 3d
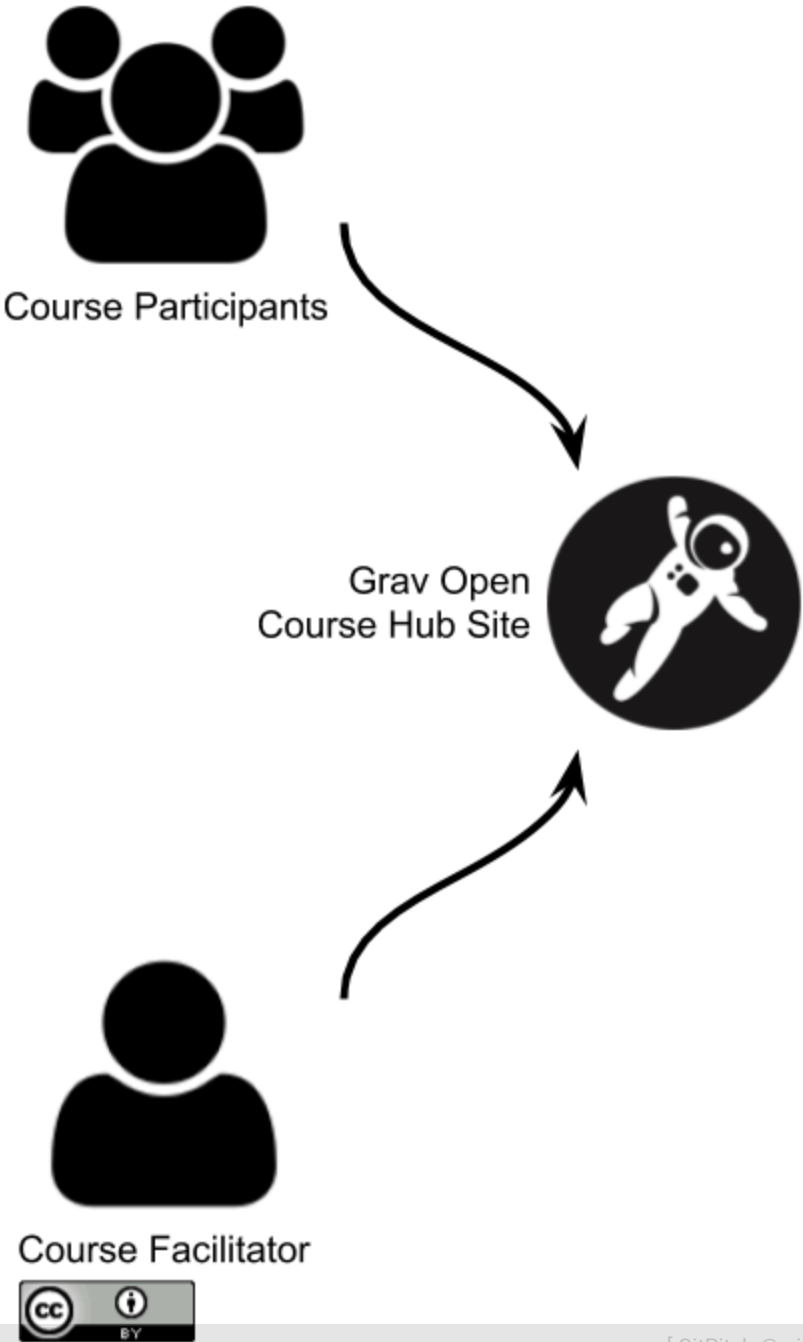(Grav GitSync) Automatic Commit from... 3d

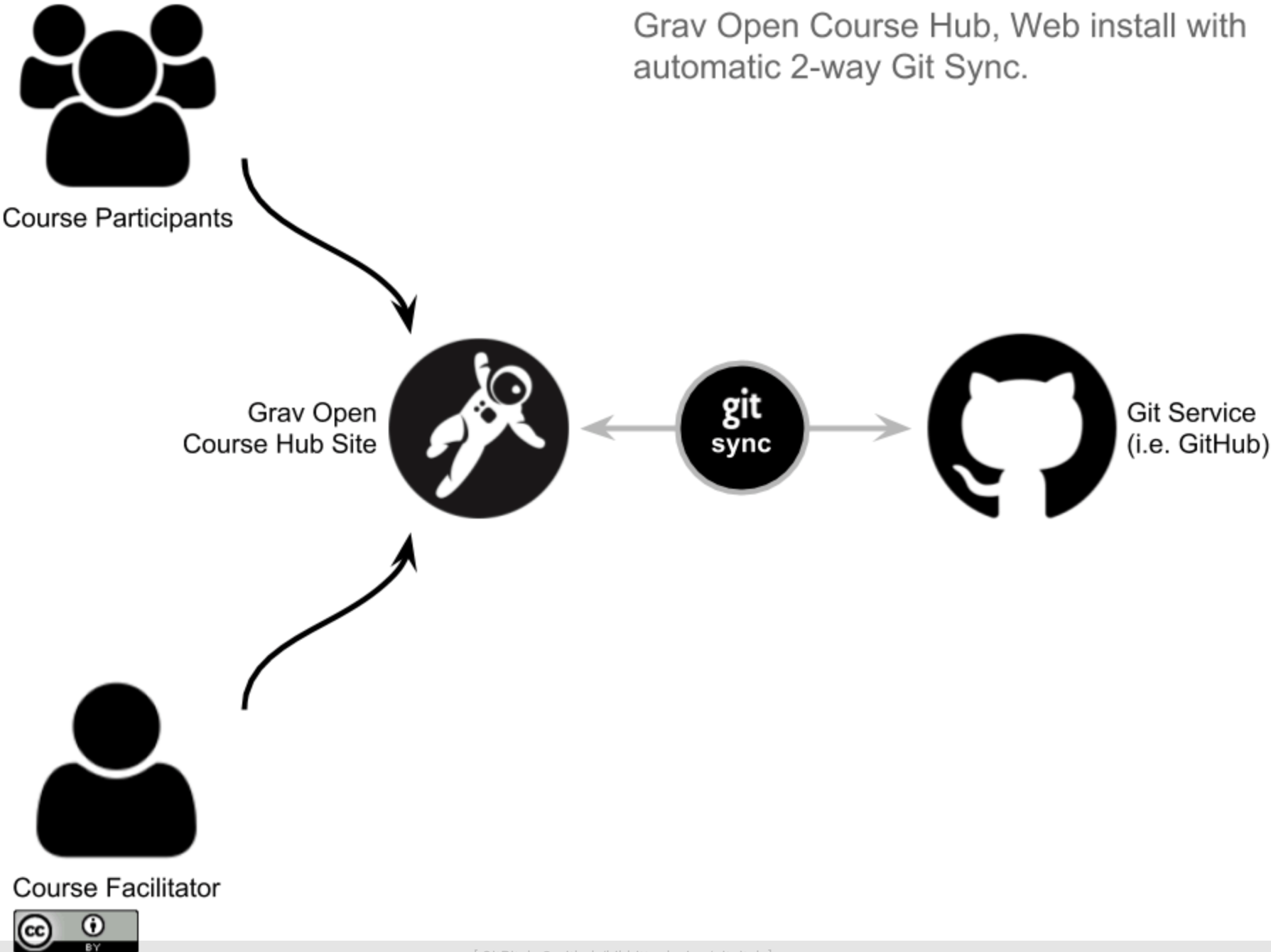# ⌨ What Skills are Required? ⌨

- 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
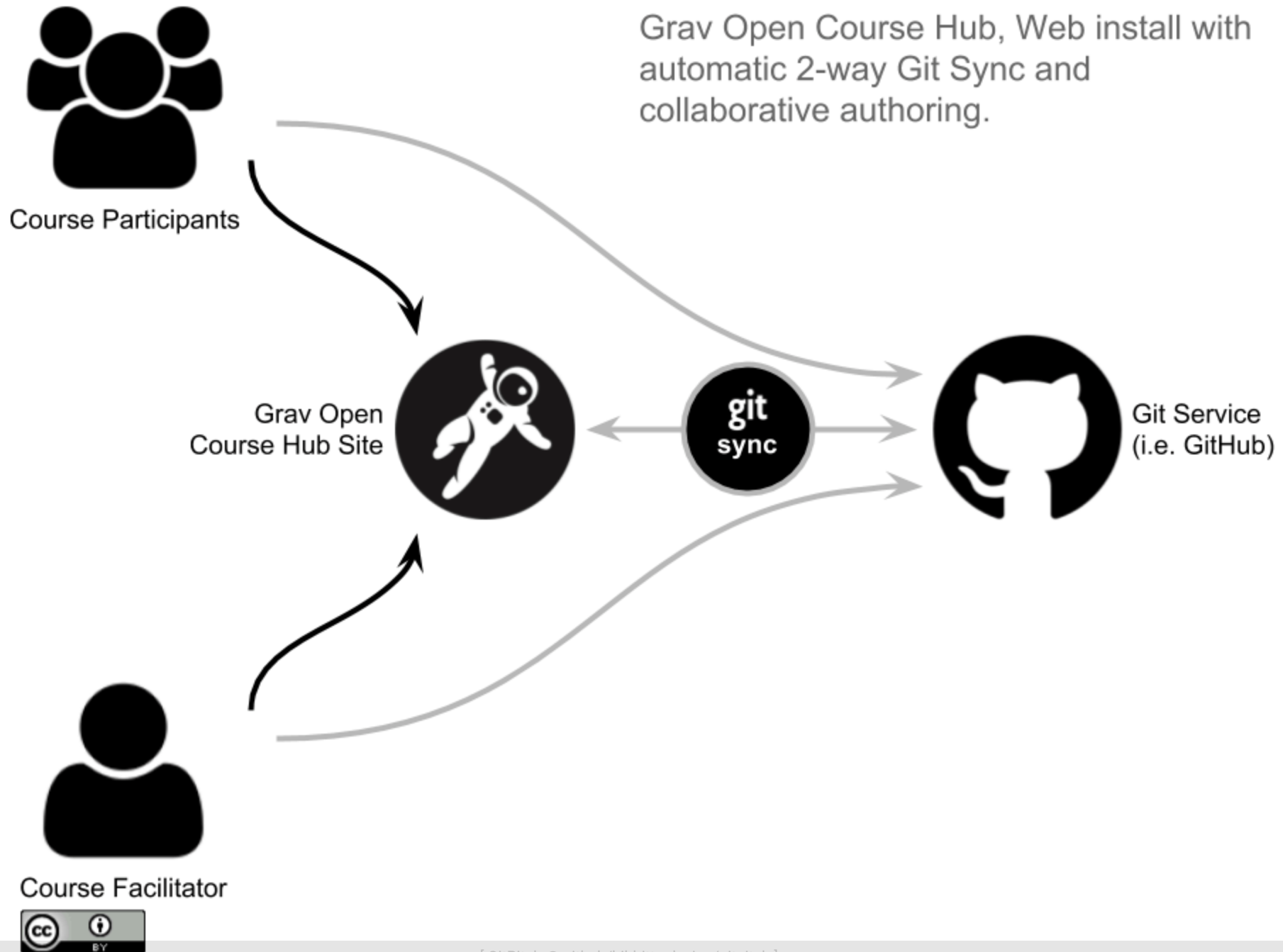   - GitHub working knowledge (recommended)

Grav Open Course Hub is Intended for Tech-savvy Educators who Value:
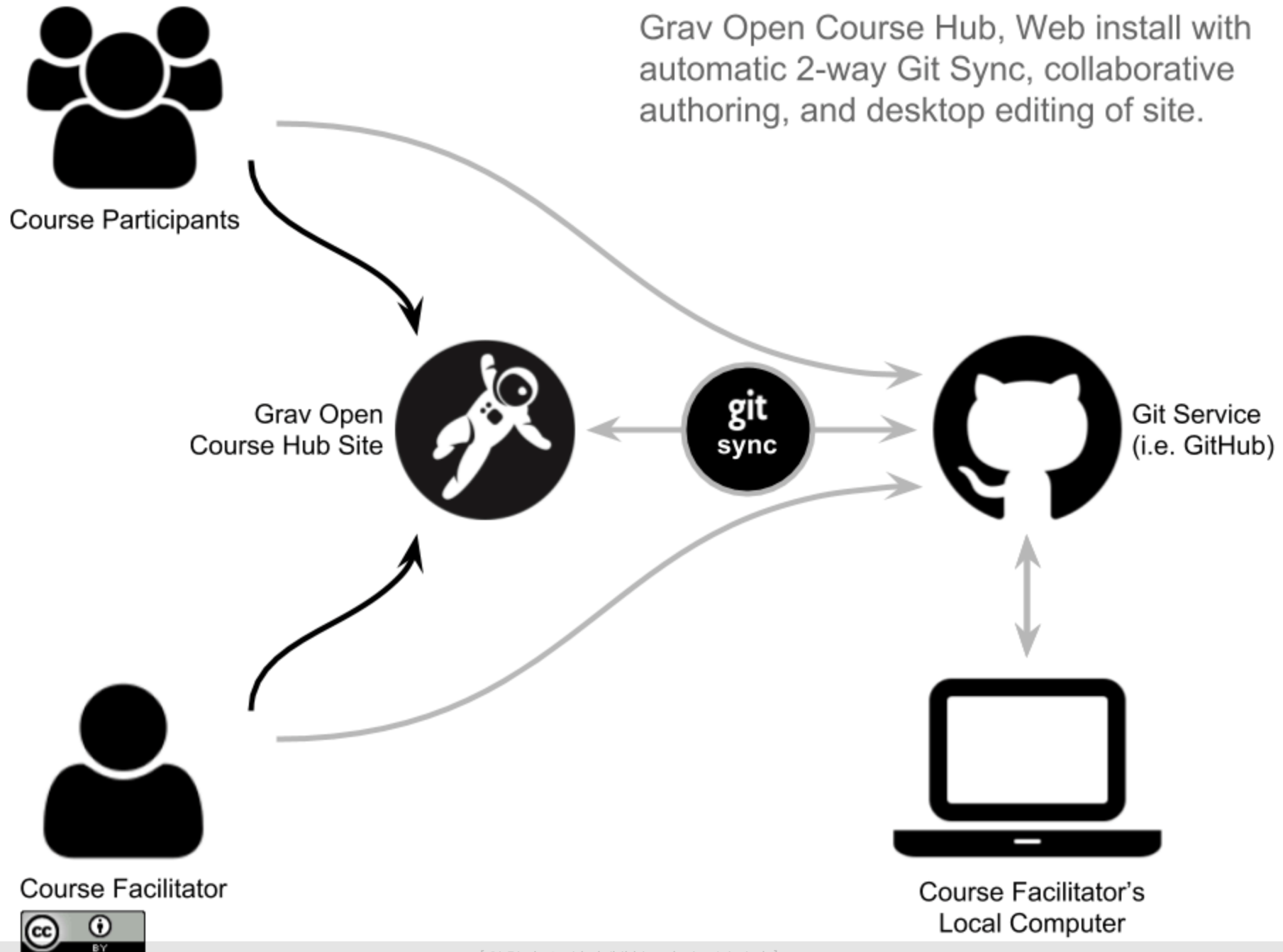
- Controllability
- Flexibility
- Portability
- Efficiency
- Openness
- Participation

Grav Open Course Hub, Web install.

Course Participants

Grav Open
Course Hub Site

Course Facilitator

Grav Open Course Hub, Web install with automatic 2-way Git Sync.

Course Participants

Grav Open Course Hub Site

git sync

Git Service (i.e. GitHub)

Course Facilitator

Course Participants

Grav Open Course Hub, Web install with automatic 2-way Git Sync and collaborative authoring.

Grav Open Course Hub Site

git sync

Git Service (i.e. GitHub)

Course Facilitator

Grav Open Course Hub, Web install with automatic 2-way Git Sync, collaborative authoring, and desktop editing of site.

Course Participants

Grav Open Course Hub Site

git sync

Git Service (i.e. GitHub)

Course Facilitator

Course Facilitator's Local Computer

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/

Wait, What about *Inside* of an LMS?

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
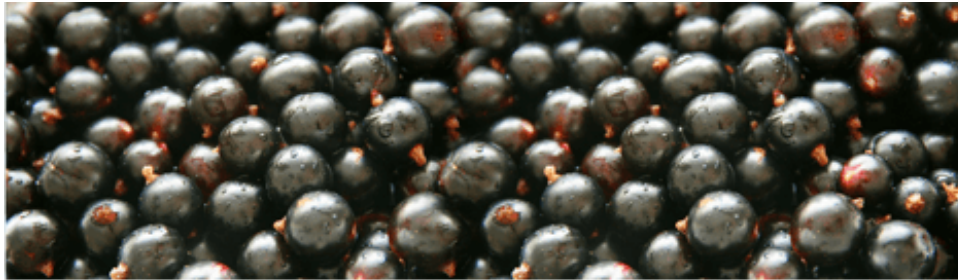
Open Publishing Space

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

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 are the biggest challenge?

- 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)

- ...or something else that you've seen today?

★ Thank you. Q&A Time! ★

Contact Info
Blog: hibbittsdesign.org
Twitter: @hibbittsdesign
Email: paul@hibbittsdesign.org

Grav Open Course Hub
Docs: learn.hibbittsdesign.org/coursehub
Canvas Demo:
demo.hibbittsdesign.org/canvascoursehub
Moodle Demo:
demo.hibbittsdesign.org/moodlecoursehub