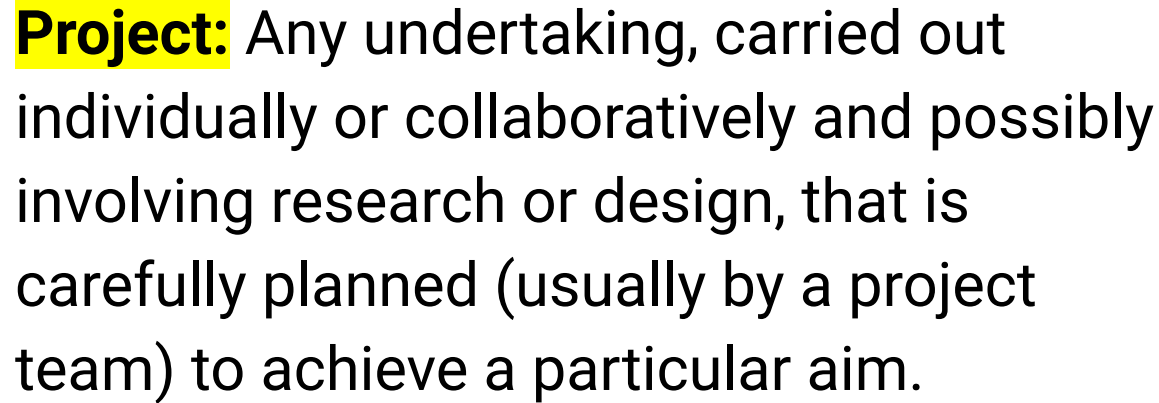# Project 1

Coding Boot Camp

Module 07

What is a project?

Project: Any undertaking, carried out individually or collaboratively and possibly involving research or design, that is carefully planned (usually by a project team) to achieve a particular aim.
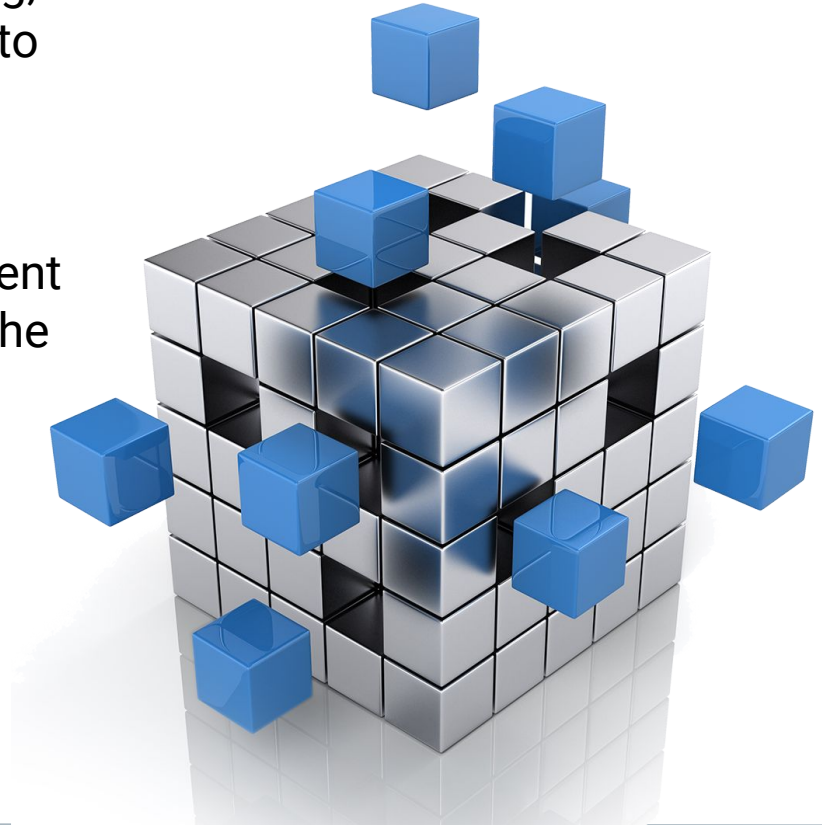
How do we carefully plan a project?

Project Management

The practice of initiating, planning, executing, controlling, and closing the work of a team to achieve specific goals and meet specific success criteria at the specified time.

The primary challenge of project management is to achieve all of the project goals within the given constraints.

What is the definition of *agile*?

agile [aj-uhl, -ahyl]

01 Quick and well-coordinated in movement; lithe: an agile leap.

02 Active; lively: an agile person.

03 Marked by an ability to think quickly; mentally acute or aware: She's 95 and still very agile.

What is agile software development?

Agile Software Development

Agile software development is an iterative approach to software development.

Agile Software Development

Deliver Value

Teams deliver value to their customers faster by working incrementally rather than working towards a big launch.

Respond to Change

Teams improve and respond to change by continuously evaluating project plans, requirements and user needs.

What is iterative development?

Iterative and Incremental Development

Working software is the primary measure of progress

The Agile Manifesto: The Four Foundational Values

Individuals and interactions	over	Processes and tools
Working product	over	Comprehensive documentation
Customer collaboration	over	Contract negotiation
Responding to change	over	Following a plan

What is an MVP?

Minimum Viable Product

A product with just enough features to satisfy early customers and provide feedback for future product development

Minimum Viable Product:

Product Vision:

How do we determine our MVP?

Determining a Minimum Viable Product

Ask Questions!

Who is your audience?

What is the problem that the product will address?

How does the product solve that problem?

What is a user story?

User stories

As a `<type of user>`   Who are we building this for?   AS A marketing analyst

I want `<some goal>`   What is the user trying to achieve?   I WANT to see referral traffic

(so that `<benefit>`).   Why do they want to achieve this?   SO THAT I can convert more leads

User stories

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User stories

As a `<type of user>`

Who are we building this for?

AS A **marketing analyst**

I want `<some goal>`

What is the user trying to achieve?

I WANT to **see referral traffic**

(so that `<benefit>`).

Why do they want to achieve this?

SO THAT I can **convert more leads**

What is acceptance criteria?

Acceptance Criteria

GIVEN some precondition

GIVEN I am an authenticated user

WHEN I do some action

WHEN I request a range of referral traffic

THEN I expect some result

THEN a chart is generated

Acceptance Criteria

GIVEN some precondition

GIVEN I **am an authenticated user**

WHEN I do some action

WHEN I **request a range of referral traffic**

THEN I expect some result

THEN a **chart is generated**

What is an Issue?

Issues

Use issues to track ideas, enhancements, tasks, or bugs for work on GitHub.

Instructor Demonstration

GitHub Issues

Student Activity: User Stories

User stories help provide context for a development team and their efforts moving forward

Suggested Time:

5 minutes

Student Activity: User Stories

In a markdown file or with a pen and piece of paper, create a user story for a mock persona using one of the following prompts:

01 A web application that keeps track of a company's payroll.

02 A mobile application that finds nearby restaurants.

03 A reminder app that keeps track of important tasks.

What is kanban?

Kanban

Kanban is a project management tool that visualizes work through cards representing User Stories or Issues.

In their simplest form, Kanban boards are broken into three columns:

To Do	In Progress	Done
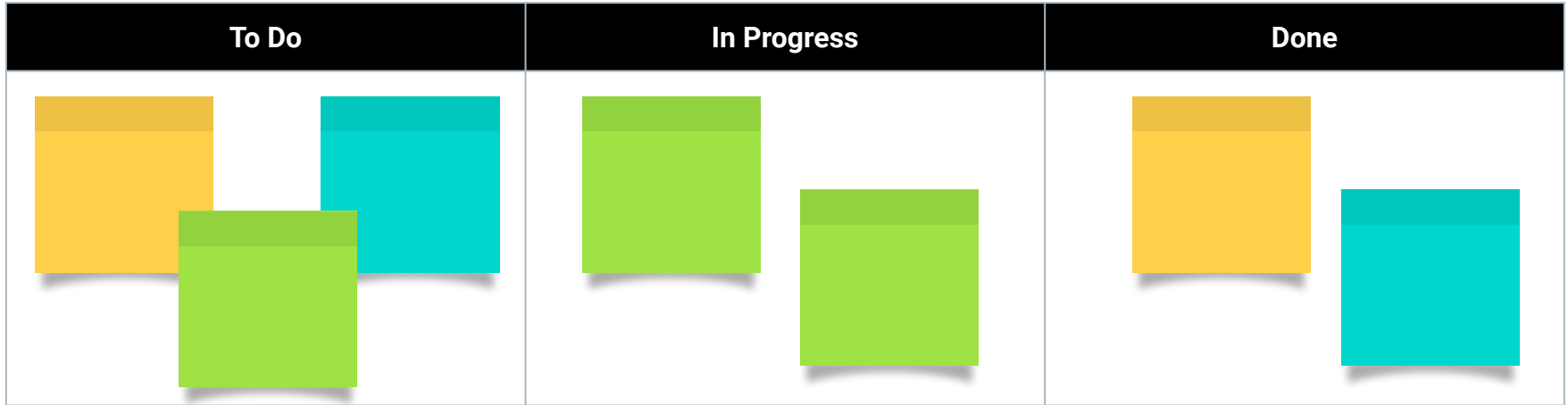
Cards begin in the To Do column and are moved from left to right as work is started and completed.

Instructor Demonstration

GitHub Projects

Student Activity: GitHub Projects

Kanban boards help developers visualize work and keep track of the status of issues.

Suggested Time:

10 minutes

Student Activity: GitHub Projects

01 Navigate to github.com and create a repository.

02 Create a new project for your repository.

03 Create a card called "Create landing page" and move it from the "To do" column to "In progress".

04 Create a GitHub Issue called "Fix broken button" and attach it to your new project.

What is daily scrum?

Stand-Up Meetings

01 What was accomplished?

02 What are your goals?

03 Are there any obstacles to achieving your goals?

daily meeting

24h

AGILE

product Backlog

SCRUM

product
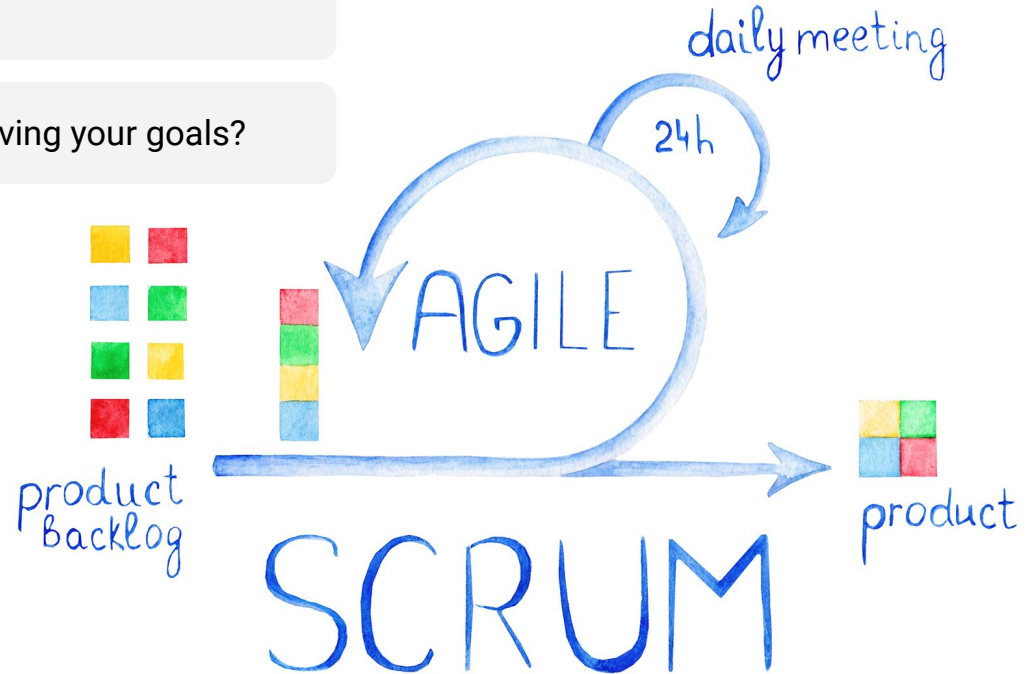
Project Timeline

First Day of Unit 07	- Divide into groups. - Write a user story. - Create a wireframe. - Create a user flow diagram. - Submit project proposal for approval.
Units 07–08	- Continue project development. - Prepare for presentations.
Last Day of Unit 08	Give presentations!

Get Professional

Projects are portfolio pieces

Use Project Week as
an opportunity to push
yourself and prove
what you know.

What is required?

Project Requirements

01 Must use at least two server-side APIs

02 Must use a CSS framework *other than* Bootstrap

03 Must use client-side storage to store persistent data

04 Must have a polished UI

05 Must meet good quality coding standards (indentation, scoping, naming, etc.)

06 Must NOT use alerts, confirms, or prompts (look into *modals*).

07 Must be deployed to GitHub Pages

08 Must be interactive (i.e: accept and respond to user input)

Presentation Requirements

You will be responsible for preparing a formal, 10-minute presentation that covers the following:

01   **An elevator pitch:** A one-minute description of your application

02   **Concept:** What is your user story? What was your motivation for development?

03   **Process:** What were the technologies used? How were roles broken down and assigned?

04   **Experience:** What were your successes with this assignment?

05   **Demo:** Show your application, live via the browser.

06   **Future development:** What are the next features you will implement?

07   **Deployment:** Your application must be deployed to GitHub Pages.

08   **Submission:** You must submit both your GitHub Pages and your live application link.

Individual Requirements

As a member of your group:

01 **Communicate:** You should be an active member of the Slack channel and discussion rooms.

02 **Commit:** Each individual should have a similar number of commits per project.

03 **Contribute:** A minimum number of four (4) commits per person.

04 **Demo:** Each member of the group must have a meaningful speaking role on presentation day.

05 **Reflect:** Everyone will participate in a group "project retrospective."

Grading Requirements

Your project will be evaluated on the following:

Technical Acceptance Criteria

Concept

Deployment

Repository Quality

Application Quality

Presentation

Collaboration

API Suggestions

Stick to APIs that do all of the following:

Allow cross-origin resource sharing (CORS)

Require simple or no authentication

Return a JSON response

Are well-documented

For a list of free APIs see: API Resources Blog Post on Full-Stack Blog

How to start?

Today's Project Checklist

Create a one page proposal that contains the following:

Project title

Project description

User story

Wireframe or sketch of the design

APIs to be used

Rough breakdown of tasks