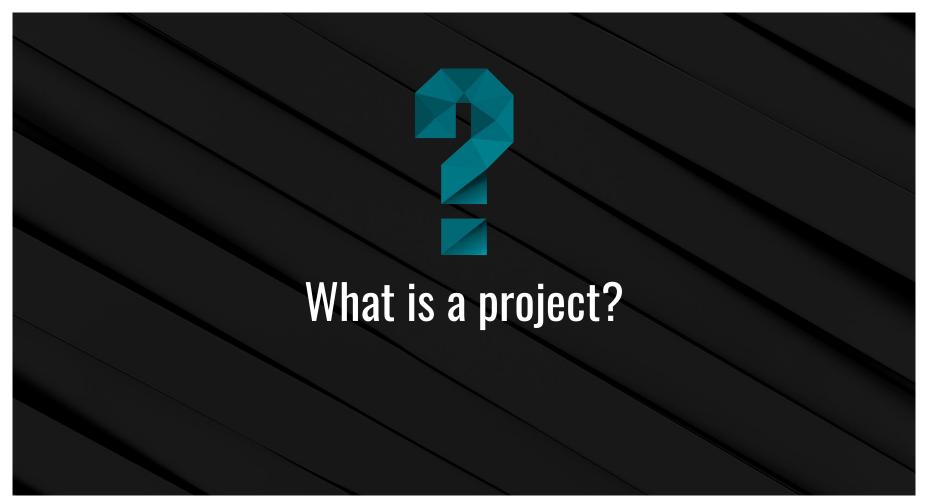


**Coding Boot Camp** 

Module 07





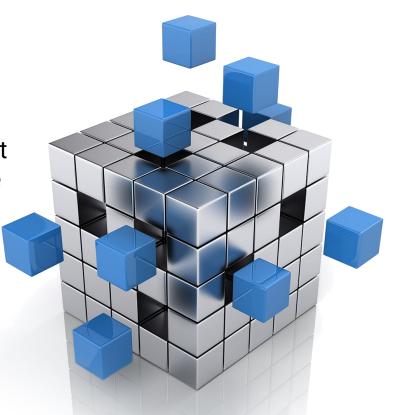
**Project:** Any undertaking, carried out individually or collaboratively and possibly involving research or design, that is carefully planned (usually by a project team) to achieve a particular aim.



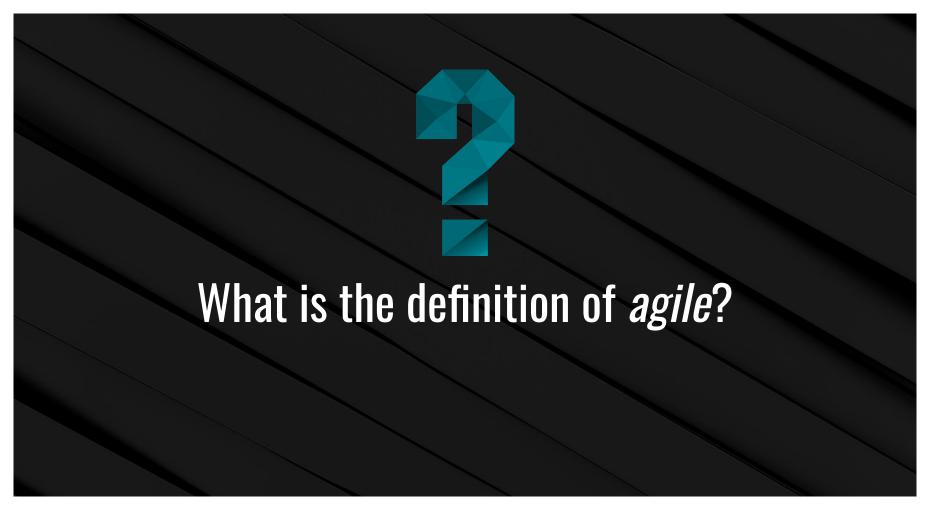
# **Project Management**

The practice of initiating, planning, executing, controlling, and closing the <u>work</u> of a <u>team</u> 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.



kipedia.org



### agile [aj-uhl, -ahyl]



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



Active; lively: an agile person.



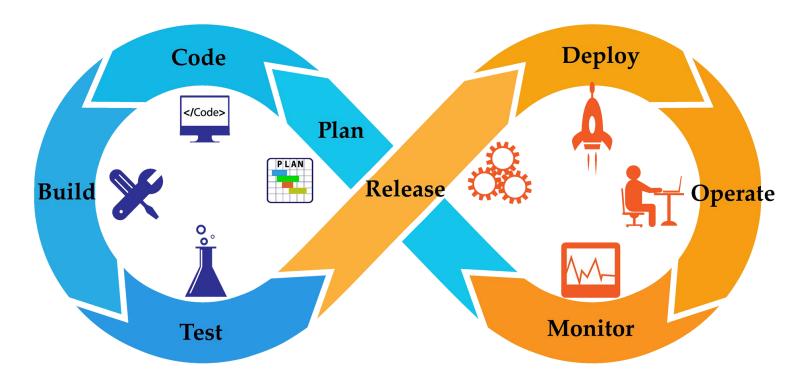
Marked by an ability to think quickly; mentally acute or aware: She's 95 and still very agile.

<u>dictionary.com</u>



# **Agile Software Development**

Agile software development is an iterative approach to software development.



wikipedia.org

# **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.



### **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



### 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:**



wikipedia.org



# **Determining a Minimum Viable Product**

#### Ask Questions!



Who is your audience?



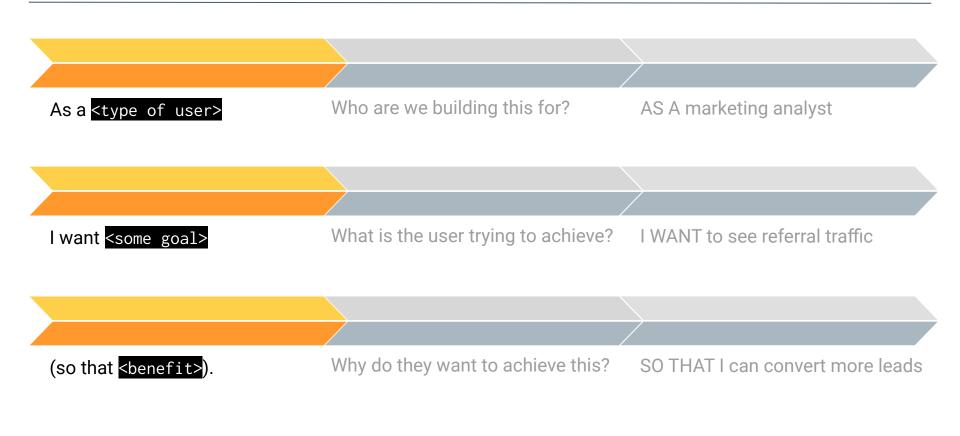
What is the problem that the product will address?



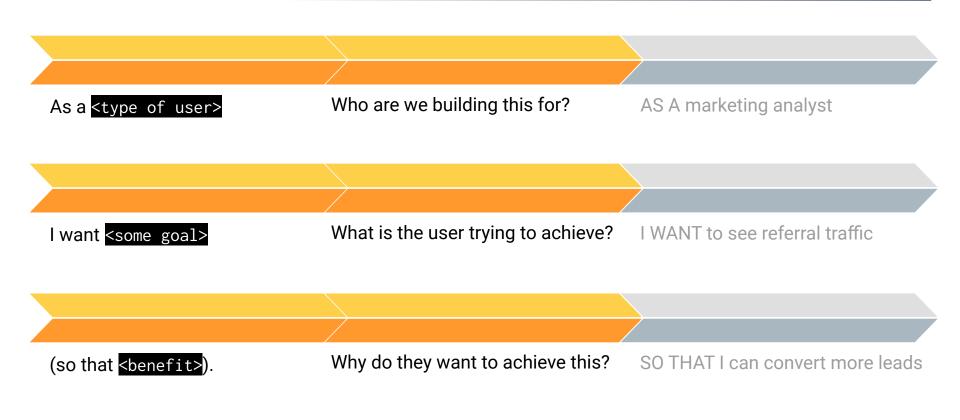
How does the product solve that problem?



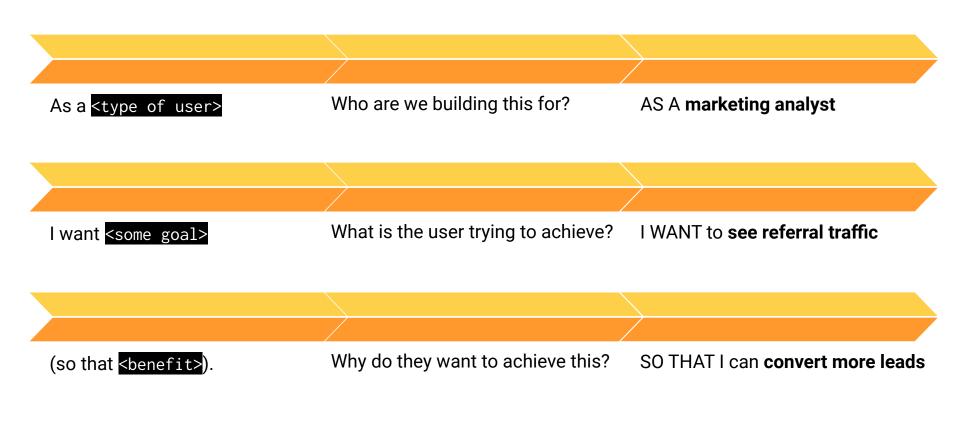
### **User stories**



### **User stories**



### **User stories**





### **Acceptance Criteria**

GIVEN I am an authenticated user GIVEN some precondition WHEN I request a range of referral traffic WHEN I do some action THEN a chart is generated THEN I expect some result

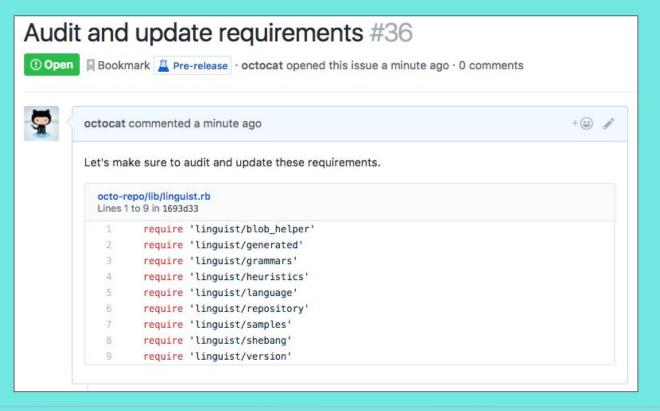
### **Acceptance Criteria**

GIVEN I am an authenticated user GIVEN some precondition WHEN I request a range of referral traffic WHEN I do some action THEN a chart is generated THEN I expect some result



#### Issues

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



help.github.com 25





# **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:



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



A mobile application that finds nearby restaurants.



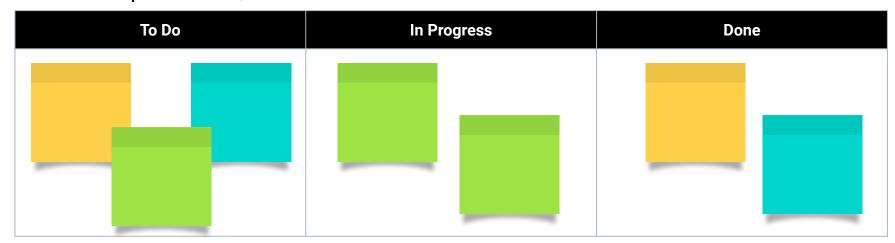
A reminder app that keeps track of important tasks.



### 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:



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





# 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



Navigate to github.com and create a repository.

02

Create a new Github project.

03

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

 $\left(04\right)$ 

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



# **Stand-Up Meetings**



# **Project Timeline**

First Day of Unit 07	<ul> <li>Divide into groups.</li> <li>Write a user story.</li> <li>Create a wireframe.</li> <li>Create a user flow diagram.</li> <li>Submit project proposal for approval.</li> </ul>
Units 07-08	<ul><li>Continue project development.</li><li>Prepare for presentations.</li></ul>
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.



### **Project Requirements**

Must use at least two server-side APIs Must use a CSS framework other than Bootstrap 03 Must use client-side storage to store persistent data 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*). Must be deployed to GitHub Pages Must be interactive (i.e. accept and respond to user input)



## **Presentation Requirements**

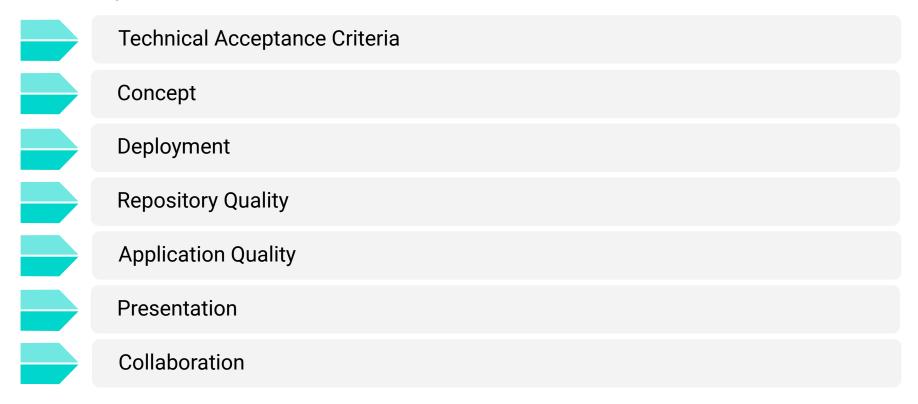
You will be responsible for preparing a formal, 10-minute presentation that covers the following:

Elevator pitch	A one minute description of your application
Concept	What is your user story? What was your motivation for development?
Process	What were the technologies used? How were tasks and roles broken down and assigned? What challenges did you encounter? What were your successes?
Demo	Show your stuff!
Directions	For Future Development
Links	To the deployed application and the GitHub repository



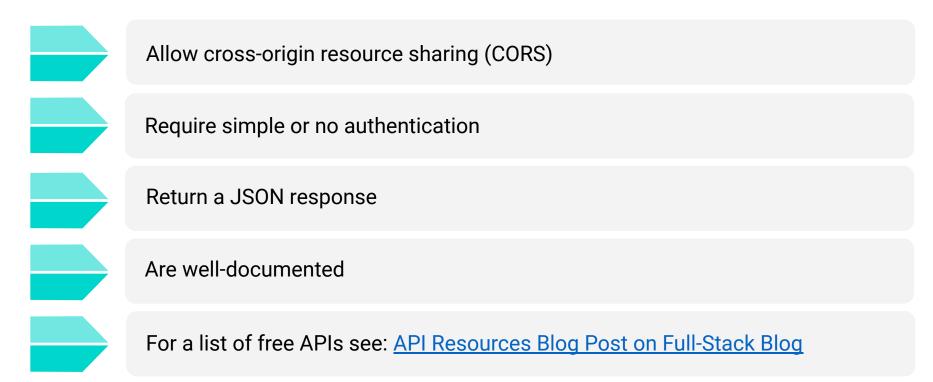
## **Grading Requirements**

Your project will be evaluated on the following:



### **API Suggestions**

Stick to APIs that do all of the following:



# **Today's Project Checklist**

Create a one page proposal that contains the following:

