Project 1

Web Development Boot Camp
Lesson 7.1

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

01 **Deliver Value**

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

02 **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

Not like this...

...instead like this!

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?

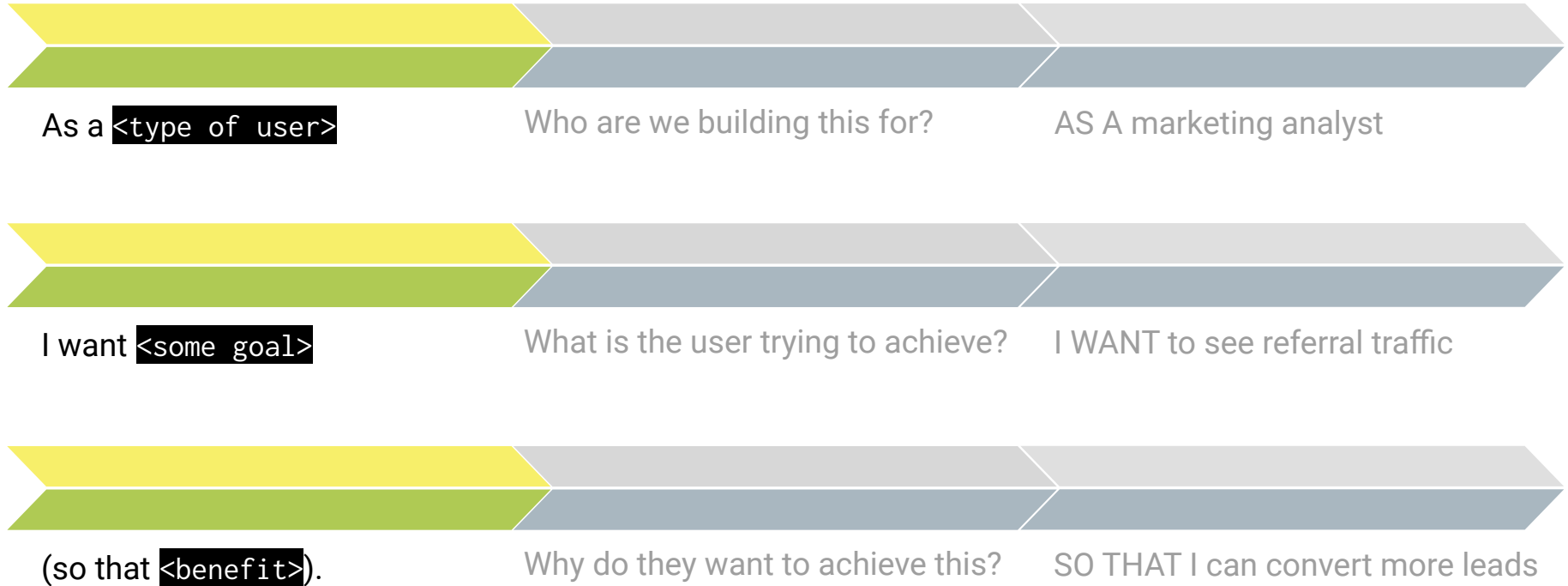What is the problem that the product will address?

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

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What is the user trying to achieve?

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(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

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What is an Issue?

Issues

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

Audit and update requirements #36

⊘ **Open**   🔖 Bookmark   ⚗ **Pre-release** · **octocat** opened this issue a minute ago · 0 comments

octocat commented a minute ago

Let's make sure to audit and update these requirements.

octo-repo/lib/linguist.rb
Lines 1 to 9 in 1693d33

```
1    require 'linguist/blob_helper'
2    require 'linguist/generated'
3    require 'linguist/grammars'
4    require 'linguist/heuristics'
5    require 'linguist/language'
6    require 'linguist/repository'
7    require 'linguist/samples'
8    require 'linguist/shebang'
9    require 'linguist/version'
```

Instructor Demonstration

Issues

Student Activity:
User Stories

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

Student Activity: User Stories

In a markdown file or on 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.

Suggested Time: 5 minutes

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
Kanban

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 Use the "Projects" tab to 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.

Suggested Time: 10 minutes

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

product

SCRUM

Project Timeline

Day 1	Day 2
- Divide into groups. - Write a user story. - Create a wireframe. - Create a user flow diagram. - Submit project proposal for approval.	Dive in to project development.
Day 3	**Day 4**
Continue project development.	Continue project development.
Day 5	**Day 6**
- Continue project development. - Prepare for presentations.	Give presentations!

Get Professional

Projects are portfolio pieces

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

Project Requirements

01 Must use at least two server-side APIs

02 Must use a CSS framework *other than* Bootstrap

03 Use at least one new third-party API

04 Must have a polished, mobile-first UI

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

06 Does 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)

Individual Requirements

Must have (at least) 4 meaningful commits in the main branch of the group repository.

Must use meaningful commit messages.

Must have a meaningful speaking role during project presentations

Must fill out project retrospective form sent after presentations are complete.

Must submit a GitHub repository link and a GitHub Pages link in BCS.

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!

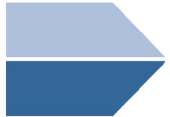Directions for Future Development

Links to to the deployed application and the GitHub repository

Project Metrics

Your project will be evaluated on the following:

Concept

Design

Functionality

Collaboration

Presentation

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: https://github.com/public-apis/public-apis

Today's Project Checklist

Create a short (1 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

Questions?