

Software Development

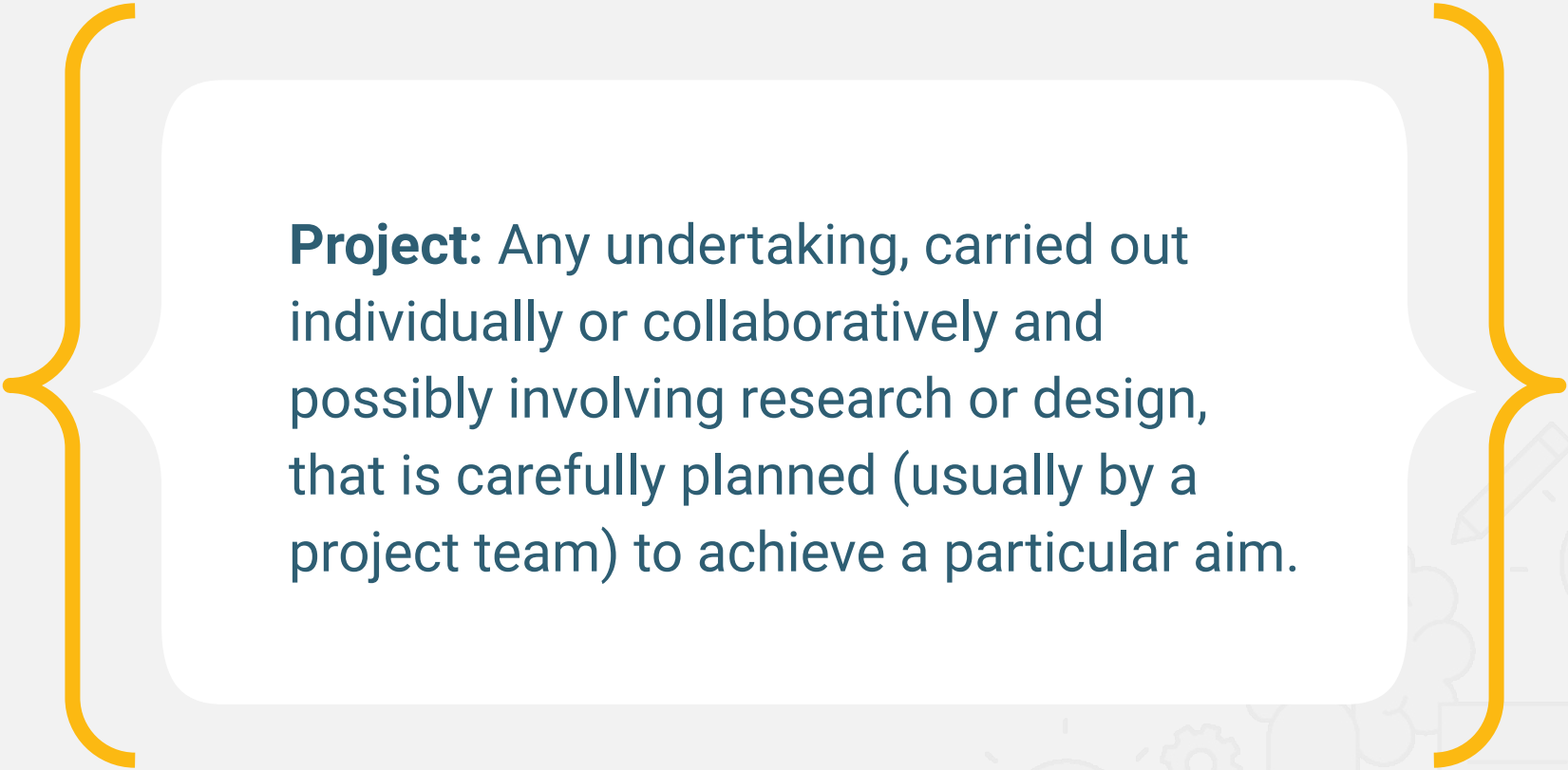
Project 1

Module 05

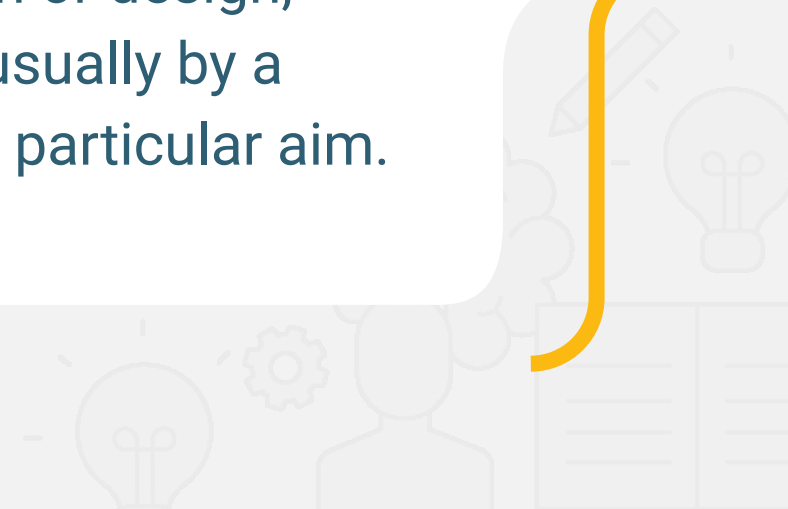


What is a project?





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.





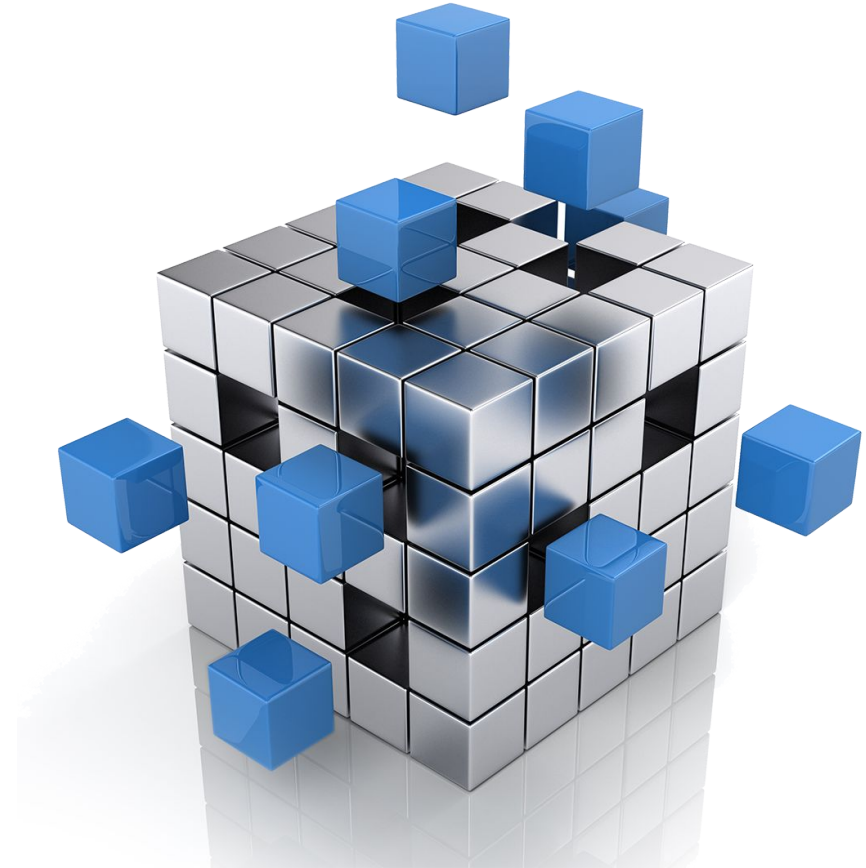
How do we carefully
plan a project?



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]



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.

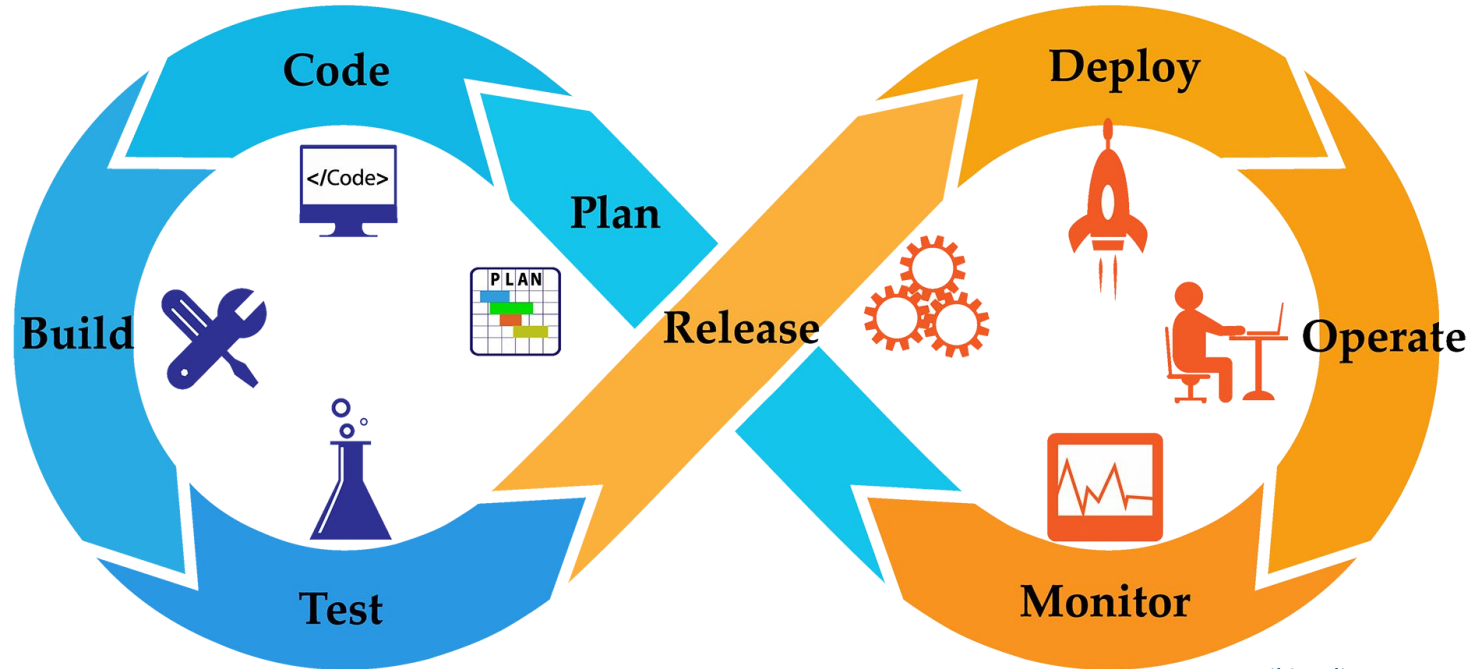


What is agile **software**
development?



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?



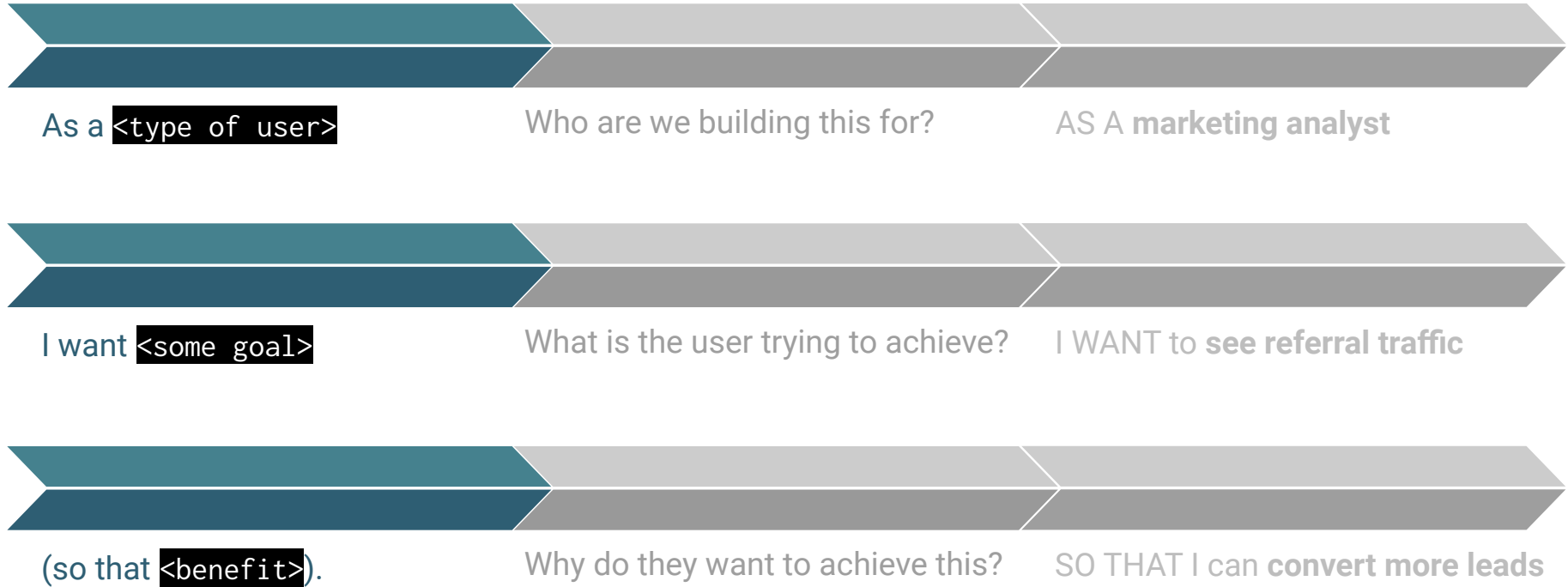
How does the product solve that problem?



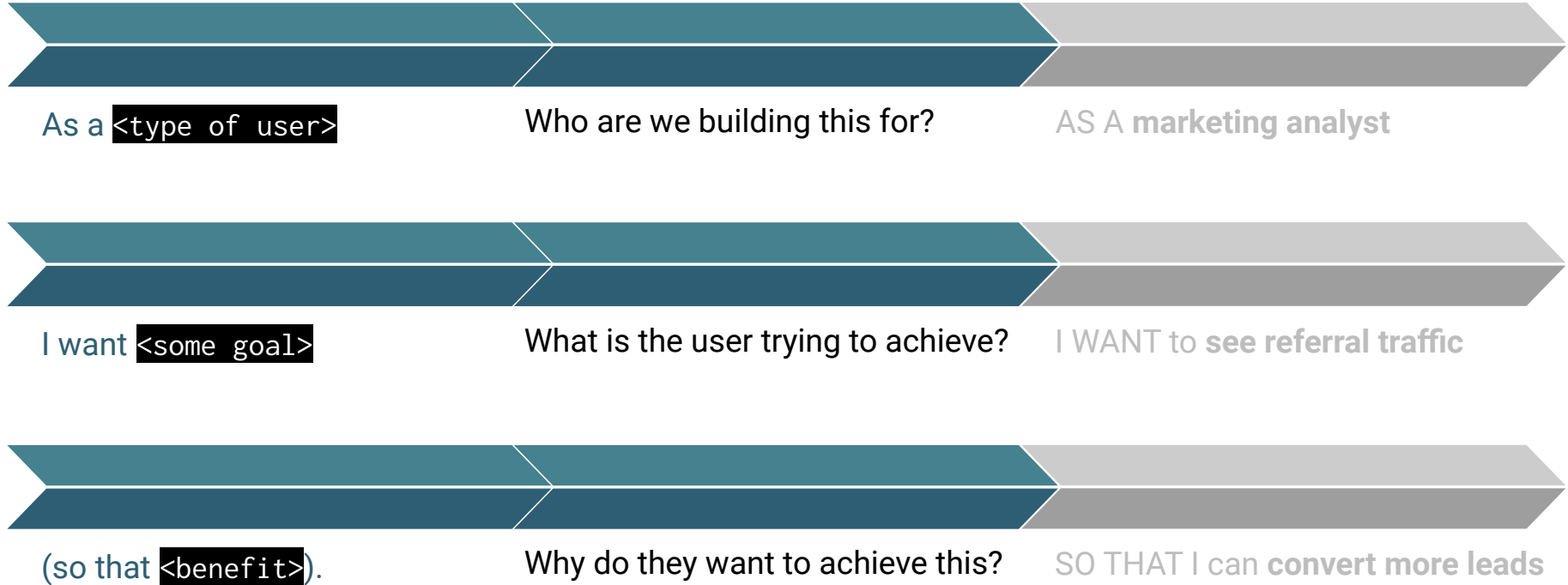
What is a **user story**?



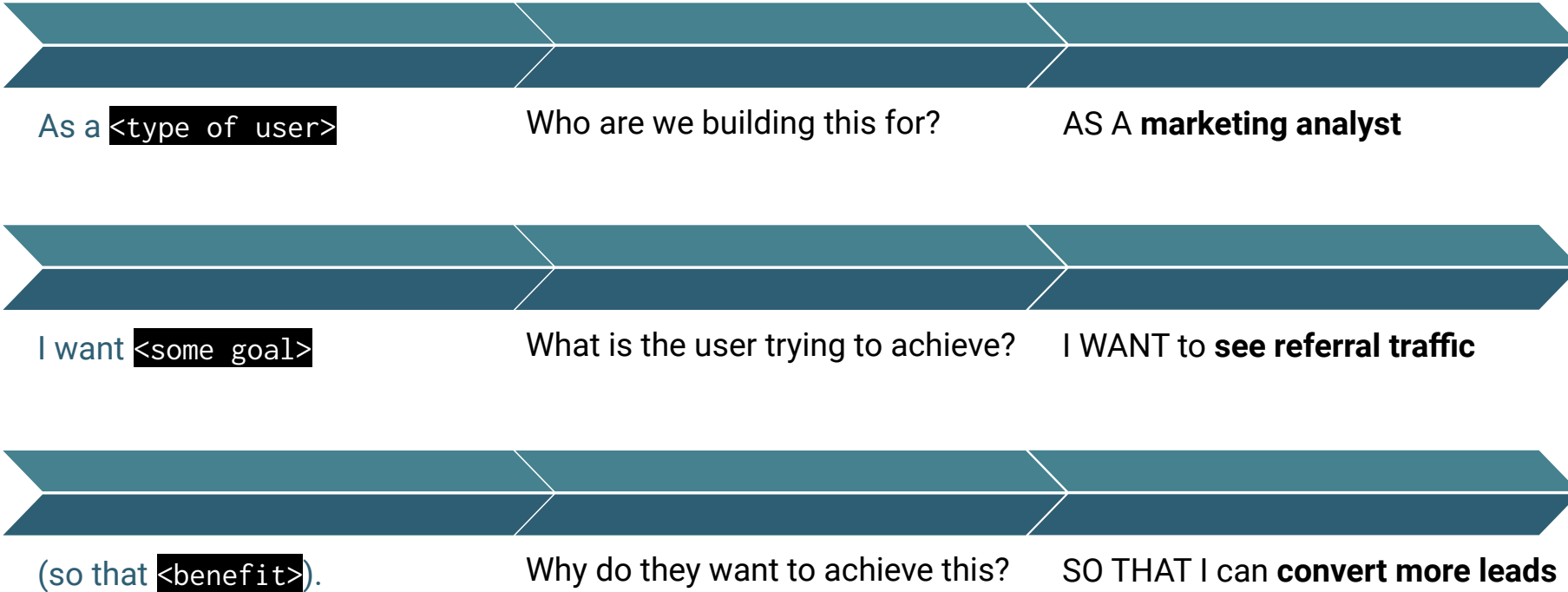
User stories



User stories



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?

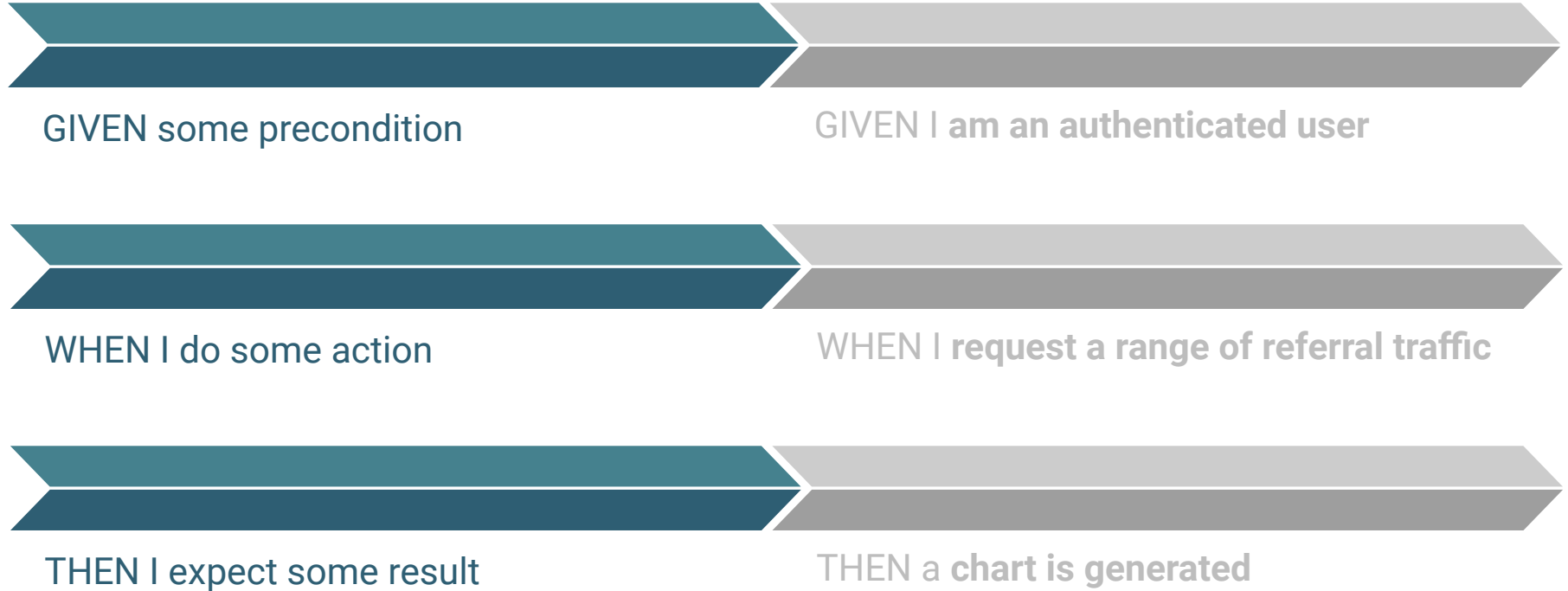
SO THAT I can **convert more leads**



What is **acceptance criteria**?



Acceptance Criteria



Acceptance Criteria



The diagram illustrates the components of acceptance criteria using three horizontal rows. Each row consists of two chevron-shaped bars pointing to the right. The top bar is a lighter teal color, and the bottom bar is a darker teal color. The text for each component is placed below its corresponding bars. The first row shows 'GIVEN some precondition' and 'GIVEN I am an authenticated user'. The second row shows 'WHEN I do some action' and 'WHEN I request a range of referral traffic'. The third row shows 'THEN I expect some result' and 'THEN a chart is generated'.

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.

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'
```

help.github.com



Instructor **Demonstration**

Git Repo Setup



Activity:

Git Repo Setup

In this activity, you will:

1. Create a repository and set up a `.gitignore` file.
2. Protect the main branch.
3. Add collaborators to the repository.

Suggested Time:

15 Minutes





Git Guide

Git Repo Setup



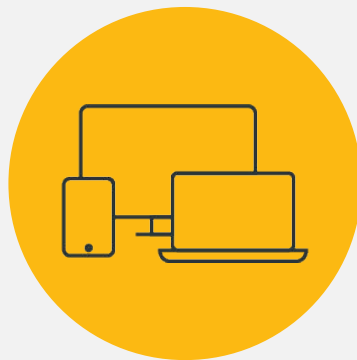
Activity:

Git Collaboration

In this activity, we will learn how to effectively collaborate with other developers on a web application that is hosted on GitHub.

Suggested Time:
10 Minutes





Instructor **Demonstration**

GitHub Issues



Activity:

User Stories

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

Suggested Time:
5 Minutes





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:

1. A web application that keeps track of a company's payroll.
2. A mobile application that finds nearby restaurants.
3. A reminder app that keeps track of important tasks



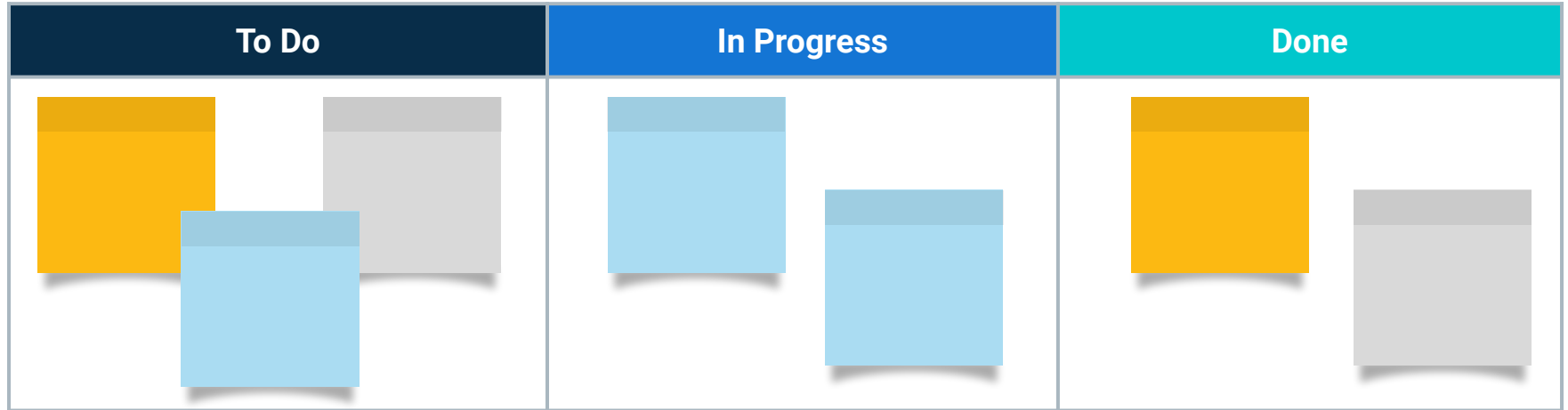


What is **kanban**?



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:



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



Instructor **Demonstration**

GitHub Projects



Activity:

GitHub Projects

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

Suggested Time:
10 minutes





Activity:

GitHub Projects

1. Navigate to github.com and create a repository.
2. Create a new Github project.
3. Create a card called “Create landing page” and move it from the “Backlog” column to “In progress”.
4. Create a GitHub Issue called “Fix broken button” and attach it to your new project.





What is **daily scrum**?



Stand-Up Meetings

01

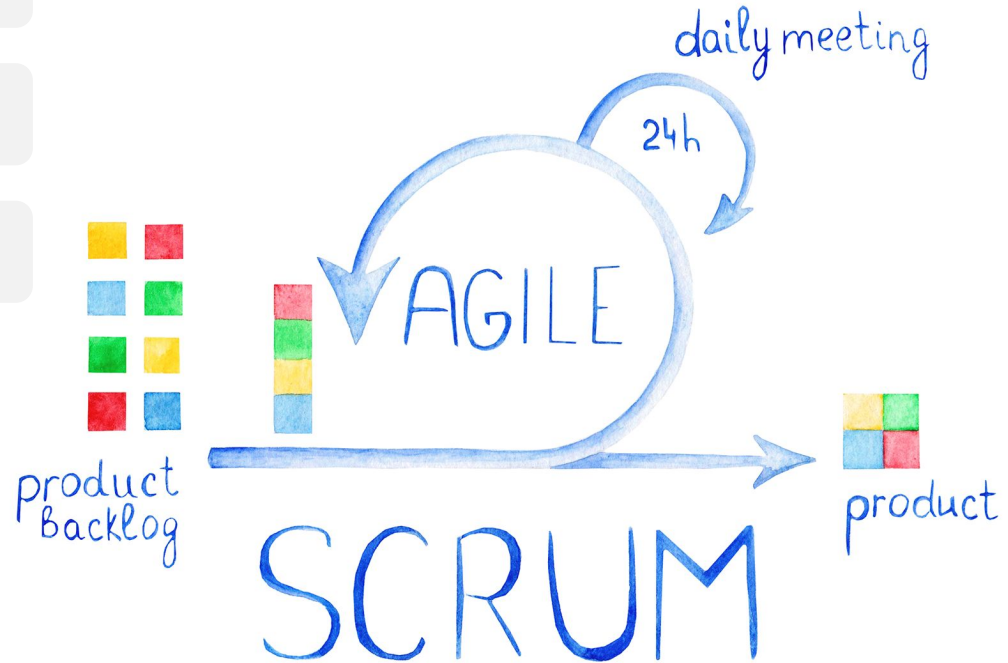
What was accomplished?

02

What are your goals?

03

Are there any obstacles to achieving your goals?



Project Timeline

First Day of Module 05

- Divide into groups.
- Write a user story.
- Create a wireframe.
- Create a user flow diagram.
- Submit project proposal for approval.

Modules 05–06

- Continue project development.
- Prepare for presentations.

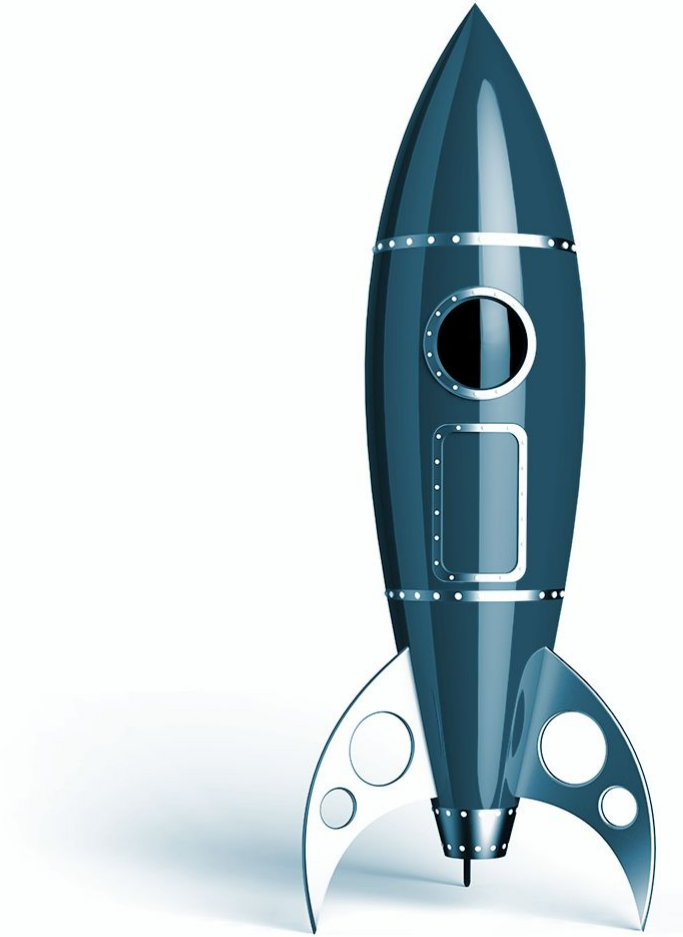
Last Day of Module 06

- 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 be responsive and have a polished UI

02

Must use client-side storage to store persistent data

03

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

04

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

05

Use a CSS framework (see next slide)

06

Must include at least one modal (instead of alert, prompt, or confirm methods)

07

Have a quality README

08

Must be deployed to GitHub Pages



CSS Frameworks

One of the requirements for this project is to incorporate a **CSS framework** into your application.

There are different ways to add these frameworks to your applications, but for the purposes of this front-end project, you'll need to use the **CDN** option.

CSS Frameworks

This is just a list to get you started. Feel free to use one not included in this list!

01

Bootstrap

02

Tailwind CSS

03

Materialize

04

Pure CSS

05

Semantic UI

06

Foundation

07

Bulma

Must be deployed to GitHub Pages



What is daily scrum?



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



What is daily scrum?



Grading Requirements

Your project will be evaluated on the following:

01

Technical Acceptance Criteria

02

Concept

03

Deployment

04

Repository Quality

05

Application Quality

06

Presentation

07

Collaboration

Today's Project Checklist

Create a one page proposal that contains the following:

01

Project title

02

Project description

03

User story

04

Wireframe or sketch of the design

05

Rough breakdown of tasks



Questions?

