

# Andela Bootcamp Prep Material

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# 1. Project Management Tools

## Overview

Project management refers to directing and allocating available resources so as to be able to meet requirements of a project within a stipulated time.

## Learning Objectives

By the end of this module, you should be able to understand:

1. Which project management tools are available.
2. How to create a pivotal tracker board.
3. How to create and update stories on pivotal tracker.
4. Link up your github repo to your pivotal tracker

## Resources

- [Quick look into different project management tools](#)
- [Getting started with pivotal tracker \(Video\)](#)
- [Getting Started With Pivotal tracker \(PDF\)](#)
- [Writing pivotal tracker stories\(video\)](#)
- [Linking your pivotal tracker to github](#)

## 2. Git and version control

### Overview

Version control is a way of keeping track of changes to files over time so that you can recall previous versions when needed and also easily work with other teammates collaboratively

### Learning Objectives

By the end of this module, you should be able to understand:

1. What version control is and why it is important
2. Know examples of version control systems
3. How to use common git commands

### Resources

- [Command line basics](#)
- [What is version Control?](#)
- [Join Github](#)
- [Installing Git](#)
- [Getting started with Git and version control](#)
- [Introduction to git\(Video\)](#)
- [Git for beginners\(Video\)](#)
- [Common Git Commands](#)

### Practice:

1. [Create a simple Repo and make your first commit](#)
2. [Introduce branching to your repo](#)

## 3. Web Programming

### Overview

This module covers the fundamentals of web programming and the technologies used in building modern web applications.

### Learning Objectives

By the end of this module, you should be able to understand:

1. Basics of HTTP Web Protocol
2. Use of HTML and CSS to create static web pages
3. Use JavaScript to create interactive web pages
4. Basics of MVC architecture
5. Basics of Web Services and API Design

### Resources

- [Introduction to Web Services](#)
- [The Fundamentals of REST API Design](#)
- [API Design Guidelines](#)
- [Introduction to HTML and CSS](#)
- [Getting Started with Flask](#)

### Practice

1. [Intro to HTML/CSS](#)
2. [Introduction to FLASK WEB DEVELOPMENT.](#)

## 4. Communication

At Andela. We know that effective communication is required for use to succeed so we are willing to ask questions, seek and request feedback, write professionally, read to understand what message is being passed and speak to be understood.

### A. Speaking to be understood

**Overview:** Andelans recognize how speaking is distinct from being understood. They can describe why speaking to be understood is a necessary skill for professional environments and regularly demonstrate an ability to be clear and audible when speaking.

#### Learning Objectives

By the end of this module, you should be able to understand:

- Principles of effective communication
- How the type of audience I'm addressing affects my delivery
- How the context in which I'm addressing my audience affects my delivery

#### Resources

- [7 Cs of communication](#)
- [Complete Lesson: Effective Communication](#)
- [7 Steps to communicating clearly](#)

### B. Seeks Feedback

**Overview:** Andelans value receiving feedback and are able to apply feedback they receive to improve on their performance.

## Learning Objectives

By the end of this module, you should be able to understand:

- Importance and benefits of seeking feedback
- Approaches for constructively and effectively receiving feedback

## Resources

- [Seeks feedback](#)

## C. Writing Professionally

**Overview:** Andelans understand that written communication is used in a workplace environment and allows professionals (e.g. Software engineers, businesspeople, professors, doctors, lawyers, etc.) to make informed decisions.

## Learning Objectives

By the end of this module, you should be able to understand:

- Ways in which you can improve your writing
- Things to check when writing

## Resources

- [16 Easy ways to improve your writing](#)
- [How to write like a pro](#)
- [Tools to help write professionally](#)

## 5. Test Driven Development

### Overview

TDD is a software development process in which one writes tests before writing production code thus giving one an opportunity to think through a systems requirements.

### Learning Objectives

By the end of this module, you should be able to understand:

1. What tests are
2. How to write tests
3. How TDD is beneficial to programming?
4. Debugging in Javascript and python

### Resources

- [What is TDD](#)
- [Getting Started With TDD](#)
- [Getting Started With TDD in Python](#)
- [Debugging in python](#)
- [Debugging python with VS code](#)