

Plan Your App Development

Time	~ 1 hour
Learning Goals	<ul style="list-style-type: none">• How can all the developers contribute to a single software development?• Are there any good practices for working together as one?• How does a software developer plan their software deliverables?

In this challenge we'll walk you through a software management method. It's called the "Agile Development" methodology.

Basics of Agile

There are various agile managements around the world, e.g. SCRUM, Kanban, LEAN 6 Sigma. In this challenge, we'll be using a combined Kanban and SCRUM method.

Here's a short video that gives a short review about Kanban:

[Intro to Kanban in Under 5 Minutes \(What is Kanban, Learn Kanban\)](#)

Now that we know about Kanban. Let's do a hands on with planning. We'll be using the [Trello](#) cloud software to start our planning.

You should sign up for the software in order to proceed.

In this tutorial, for simplicity's sake and since you have already built it last week, we'll be walkt through the planning process for a Bit.ly app.

1) Forming The Backlog

This is where we break the feature list down into executable items, known as stories, and park them inside a list called backlog.

NOTE:

A backlog store is a list containing all the listed stories. It describes the requirements needs to be fulfilled in order to build a full app.

The ending should look something like this:

2) Creating Stories

Plan Your App Development

Now, we are going to create our feature stories for our Bit.ly App. Usually, the product owner (whether he's a project manager/founder etc.) thinks from the user perspective, something like what will user gets after this story. Example:

1. User accounts feature
2. Short URL Generator
3. Redirect Portal

NOTE:

For your first time, it's okay that you can get story and task confused. It's perfectly fine as long as there is progression. Remember, the story is about a feature, not tasks.

By plotting the stories, your Trello board would look something like this:

3) Prioritize Stories for Execution

Prioritization is different across the organization. In this tutorial, we'll be teaching you a simple scale that helps you dive through your task list, i.e.

1. Something I can't live without it - Label Red
2. Something important but I can work around it - Label Orange
3. Something extra and I'll do it when I'm free - Label Yellow
4. Implemented / Done - Label Green

NOTE:

Think like you're going into Treasure Hunting with Indiana Jones into a cave and you're suiting up. So let's review the following items:

1. **Knife** - *For me, It will be something I can't live without it.*
2. **Kevlar Suit** - *For me, jean works but it's good to have.*
3. **T50 Armor Tank** - *Nah it's too much. If I got the money then I'll do it.*

As you prioritize stories, sometimes you'll encounter cases such as the story is too big or redundant and you want to take action upon it. Please go ahead.

This means progress. Sometimes, big stories are broken down to smaller stories for easier commitment and move forward. Similarly, small redundant commits such as task can be merged/archived.

It's always best practice to churn your backlog once a week, from time to time.

Plan Your App Development

For our tutorial, we'll be breaking down more features for guidance purposes. Feel free to break more into smaller stories. By this stage, your Trello should look something like this:

4) Fill in tasks for Each Stories

Now that we have a visual over the feature list, we can list out the tasks for each story. With the task list, you can list down what are the critical items to do. For example:

Say for the User Account story, we need to explore any available gems.

Then, we need to study the selected gem complexity to see how long we can install.

Then, we need to have a unit test against the system.

Then, we need to test the user experience to ensure we don't make our customer mad.

Then, you can imagine anything else you want to plan out for your task. Just remember don't spend too much time in it.

Like prioritization, you can churn your backlog by breaking big stories to smaller ones and vice versa after some "eureka" moment.

Your screen might now look something like this:

5) Sprint

Yeap. You're done with a basic software planning. Now, it's down to execution. We will be using a different method called SCRUM to enhance Kanban. SCRUM's timebound concept allows you to keep track of your development performance, measure and improve.

Typically, a small team (2-3 persons) sets a 1 week time bound (known as sprint). Hence, for this team, the first day is usually repeated at #1 to update the planning to adapt to any changes.

That's it for this challenge! From now on to the end of the bootcamp, we encourage you to plan your app development using Trello and Scrum, be it when you build an app on your own or during your final project.