Managing Weekend Projects

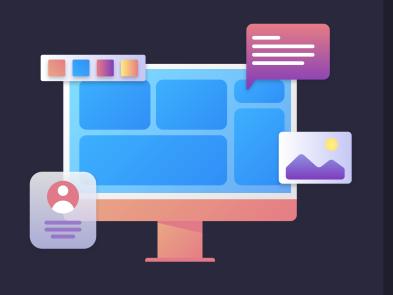








TABLE OF CONTENTS

/01

Why do we need a managing system?

/02 First steps

Design doc, time allocation

Creating tasks

Main tasks, breaking down tasks, connecting tasks, prioritizing

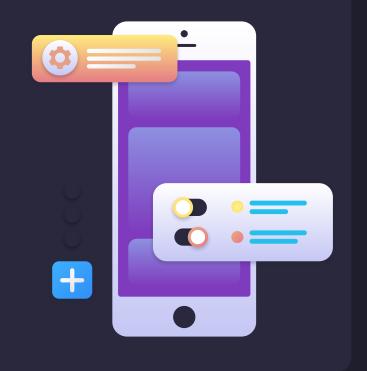
Project management

Tools: git, github issues, time tracking, trello









0





- Working on a software project is a big task.
- Whether you are alone or a part of a team, have a simple project or a complicated one there are a lot of moving parts.
- So what can we do in order to create and manage our projects more easily?







- In this lecture we will talk about things that can help you manage your weekend project better.
- In real life you might do things a bit differently, because you will have more team members, different goals, etc.
- The methods I will talk about are a part of the AGILE family.





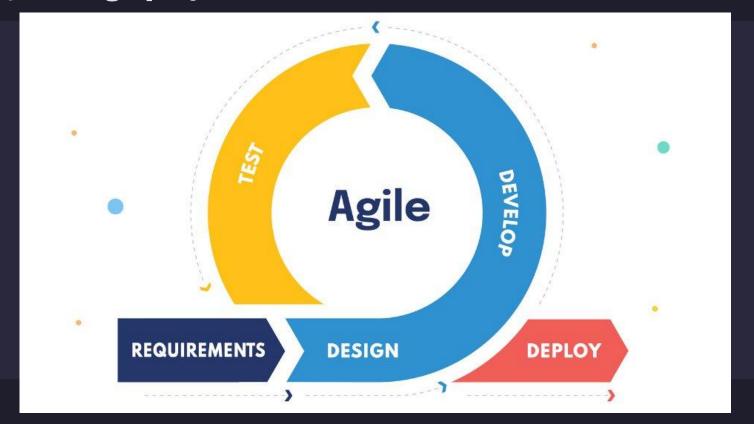


- The idea of the agile methodology is that software development is not a linear project.
- It's not start → finish after X hours, it's more like iterations:



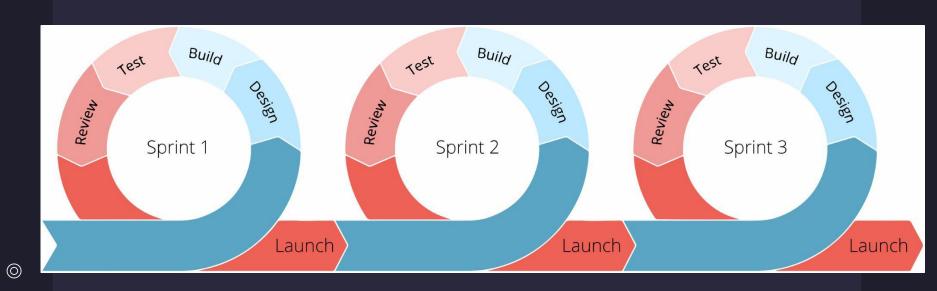








0



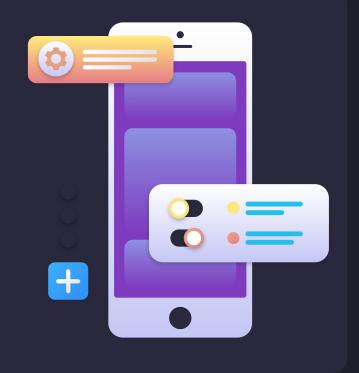




- In this lecture we will talk about things that can help you manage your weekend project better.
- In real life you might do things a bit differently, because you will have more team members, different goals, etc.
- So the way I talk about agile in the weekend project senese is not exactly how it works in real life.
- I will describe points from SCRUM.

/02

First steps



0





- First of all, there are no rules!
- Everyone works differently, and it's ok. The only important thing is that the job gets done, in a practical and clean way.
- If some or all of what I say doesn't help you achieve this goal then don't use it.







- Managing a project is a big field of study, and one in which i'm not an expert.
- I only give you a few tips and methodologies that I found helpful.
- I will give more resources that can give you a more professional advice on the subject, at the end of the slideshow.







- For me, the first step is the design document.
- This is the document that describes the project in the general sense.
- If you are a part of a business or a part of a big team, then your design doc will be different than what I am going to recommend.







- For a weekend project, I recommend that the design document will include:
 - Project goal
 - Project design
 - Project total available time
 - Project milestones







- Project goal: what are we trying to build?
- Give details, but not specifics.
 - Example: a landing page for tesla, that shows the latest modules.
 - Not: a page for tesla that shows model 3 and the max speed.





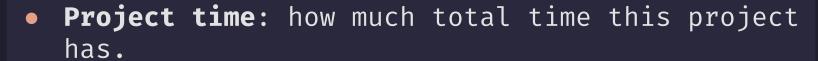


- **Project design:** how we are going to build it. What are the main components.
- Describe each component general purpose, but without too specific details.
- For example:
 - First page: general tesla module details
 - Second page: testa technical specs
 - Third page: contact page









- In real life, there not be a specific number here, but a general timeline.
- For the weekend projects, give the actual number of hours you have for the project.
- **Be exact**! Don't write general numbers. If you have 20.3 hours, this is what you write.







• **Project milestones:** we will talk about it more on the next section.

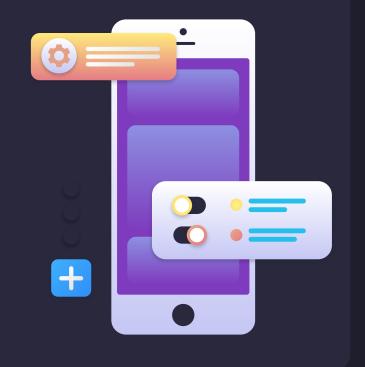






/03

Creating tasks



0





- This is one of the most important parts of planning a software project.
- The first missions you need to create are the big one - the milestones.
- You can think on a mile stones as significant steps in the development process, such that there is a huge difference before and after the milestone.







- For example, for tesla:
 - Milestone 1 entire site grid structure.
 - Milestone 2 add images and specific style
 - Milestone 3 make app responsive







- Now that we have a milestone, we need to break them down to specific tasks.
- Here is the place to be as specific as you can.
- I recommend that each task inside a milestone would have the following attributes:
 - Name of task
 - Description of task definition of done (DOD)
 - o Assignee (how is responsible = you)
 - difficulty/Estimated time
 - priority



- For example:
 - Milestone 1 tesla grid
 - i. Task A:
 - 1. Name: header
 - Description: create header. DOD: have a nav header with 4 elements inside Make sure that the alignment is correct - for outer elements and inner elements.
 - 3. Priority: high
 - 4. Difficulty: 4 / estimated time: 3 hours





- What is difficulty?
- We can use a scale of 1-4 for difficulty.
- More difficult tasks take more time.
- Why not just estimate the time each task is going to take?
- Because it's hard to know beforehand.







- Important:
 - Be as precise as you can with your tasks.
 - Make sure that not all tasks have the same priority.
 - o Give detailed DOD. more details =
 easier to track your progress.









- If we used the difficulty scale (1-4) for tasks, we need to estimate the ration points/hours.
- For example, I can estimate that 1 difficulty point = 1 hour.







- Then, as the project continues, I can measure the time a task took and compare it to the difficulty point, and change the ratio accordingly.
- Important: you have to make sure that the total amount of hours for each task is equal or smaller than the total amount of hours in the design document!







- So now we should have a good foundation for our project.
- We have clear goals for the project, with general time
- We have big tasks (milestones) that are broken down to smaller, well defined tasks.
- Each task has estimated time, and the total time is equal or smaller than the total time















- Know our task is pretty simple: work on tasks based on priority, and track the time.
- There are millions of tools to help do both.
- I will go over basic ones.







- Github projects:
 - Allows you to create tasks (issues), attach them to a milestone, and place them according to their status.
 - o tutorial: https://www.youtube.com/watch?v=YVFa5VljCDY &ab_channel=edutechional







- everhour:
 - Track time based on task. Can connect to github issues.
 - o https://everhour.com/
 - Tutorial:
 https://www.youtube.com/watch?v=kcrv_d-F0-c
 &ab channel=KnowledgeByMarcus







- Git and github:
 - Git can be used to break you big tasks into smaller branches.
 - Github issues and milestones can also be used







- General project management software:
 - o Jira
 - Monday
 - o asana







- Important: the tool is not important! It's just here to help.
- You can use google docs for everything if you want, the important thing is to complete the tasks.
- Tip: put tasks with time on google calendar.
 See visually how your days is going to look like. Track your progress! Make sure you are not overflowing!







- Read more about agile: https://www.atlassian.com/agile
- Agile methods: SCRUM, kanban, etc
- Scrum: https://www.wrike.com/scrum-guide/
- Kanban: https://www.atlassian.com/agile/kanban







Thanks, and good luck!

Contact us:

Yishai

<u>yishain@appleseeds.org.il</u>

0524605642

Shadi

shhadys@appleseeds.org.il

0543113297







