# Doing the steps of SDLC to come up with a reasonable P2 project

## Plan

* Find a problem and come up with a solution to solve it using the tools given to you or any experience you want to utilize
* It doesn’t have to be a problem; you can also come up with creating an application that is P2 worthy
* Ex:
  + P2 project utilizing websocket.io to create a live multiplayer session game(s) in their website
  + P2 project that solves a specific problem:
    - Healthcare profession needs to automate certain things in their daily lives by utilizing some website
    - Education professions needs a website to easily explain some topic either through some simplified game to explain physics, algebra, biology (whatever topic)
    - Etc.
  + P2 project that emulates a social media type of application that have live chats, posts, to do list, etc.
  + P2 project utilizing canvas api to create a drawing application that emulates Pictionary game
* Research any external api you might need to solve your problem or what your application might need
* Be risk takers, you’ll probably have requirements you can’t complete and that’s completely fine. It is more impressive to use a tech you never learned but only use it in the simplest form vs. someone who just copied and pasted a store app.
* You have more people, be sure to utilize everyone to accomplish big tasks
  + Have certain people research specific things about the project and have them present during standup on what they found and make a group decision to either pursue it or not

## Project Requirements

* After researching all the cool things, you want to do with the application, it is time to put it on an actual real accomplishment.
* Don’t do this step until everyone agrees on an actual plan first.
* Now every comes up with realistic steps to get your idea working
* Ex:
  + If you do a social media app
  + User can create an account
  + User can login as that account after verifying their email
  + User can be able to post
  + User can be able to find friend
  + User can accept friend invites
  + Etc.

## Product Architecture

* Think of the tech stack you’ll need and if you do research and found necessary tech stack, be sure to include it here as well.
* It should be under “Tech Stack” on the P2 proposal.

## Building/Developing the product

* The biggest time spent for your P2.
* You need to conduct standup everyday to see where everyone is and see if there are any blockers that needs to be addressed by everyone.
* Communicate is key.
* Kanban board to see if your project requirements are being met and how many more is needed to be done and see how much someone has contributed to the project.

## Testing the application

* **SETUP A PIPELINE EARLY**
* A pipeline will just tell you any early warnings if you can’t even deploy the application
* A lot of setups needed but trust me it is worth it
* You have two servers now and they both need to be deployed to work correctly
* Of course, have actual unit tests to make sure whatever you wrote in the BL works so that the frontend team doesn’t go “why isn’t this working everything looks fine?!” only to figure out after 2-3 days wasted that it was the backend teams’ fault, but a nice unit test would just help isolate who’s fault it really is.

## Deployment

* Taken care of by CI/CD just manually test it to see if it all works
* Give it to family members and see if they can mess it up by doing something you never ever expect them to do (and they will do something you will never expect)
* Don’t give it to strangers online… they have the tendency to make it a challenge to break it.

# Where do Stephen come in to all this?

* He doesn’t.
* This is your project and you’ll be doing things I won’t expect.
* Your team is the best resource you have since your problem is their problem and my one brain cannot outwit 4 brains.
* The only time I come in is as your manager and to do conflict resolution if someone isn’t pulling their own weight.
* I will do standups every Wednesday to see how each team is going with their project (remind me please I have a memory of a goldfish)
* You will have your own team but there are many scenarios when a team figures out a new tech stack and they share the knowledge and now everyone has that tech stack and that will all benefit you guys since coming P3 you all work together.