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App Development Practices
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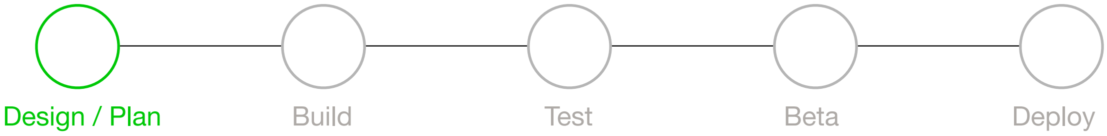
CHAOS REPORT

As I was racing my thoughts, thinking about various projects I have done in my most recent co-op, one project stands out to me as a perfect project to break down for this report.

a couple of months ago, I was working for a successfully funded start-up and was fortunate enough to get a project that we had to write from scratch. It was making an API that would deliver some information so that our front end application can have real-time data pulled in from the API.

Starting a project from scratch had its hurdles. It meant we had to plan everything and assign roles before just going at the coding part. It was an unanimous decision that we needed to invest most of our time in the planning phase to avoid problems associated with poor planning.

After 2 weeks of planning, 20 different iterations, and countless meetings we had a roadmap.



"The only certainties in life are death, taxes and bugs in code."

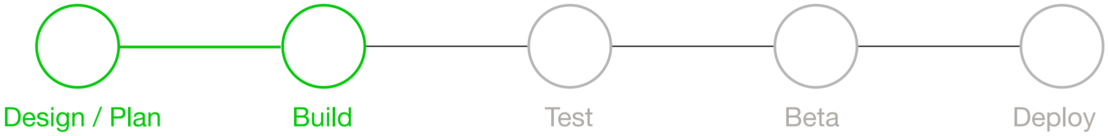
– Anonymous

If everything went according to the plan, the API was supposed to be deployed in late June/ early August but rarely in life, everything goes the way you expect let alone writing code.

The biggest challenge we faced was reading through the AWS documentation. Everything in this project was backed by AWS from API gateway to DynamoDB for the NoSQL database and the fact that we couldn't rely on Amazon Documentation made the project more time-consuming.

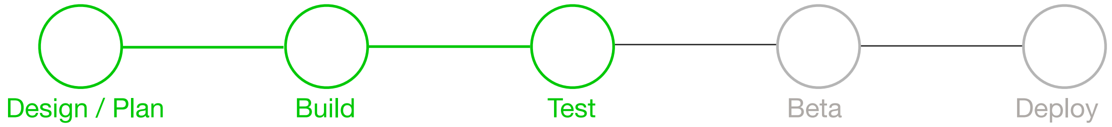
Another challenge was when we found out that Amazon only allows you to run a function for a maximum of 15 mins. This meant we had to re-plan a whole section of the project again because the original idea was to inject data into the database via an automated function that would run multiple times throughout the day and as we were dealing with a large database this operation required the function to run for more than 15 mins.

What was supposed to take 2 weeks ended up taking us 5 weeks instead



Fortunately, the rest of the build phase was a smooth sail with the internal testing we had to fix minor bugs and make sure the code ran efficiently with the actual database.

With testing and building out of the way, we decided to do a beta deploy in one department of our company and collect the data to see if we can further improve before a public release.



Whilst we still haven't had a public release for the API we are on track and with more and more internal testing we are getting valuable data that will only make the product better before it is public released

Conclusion.

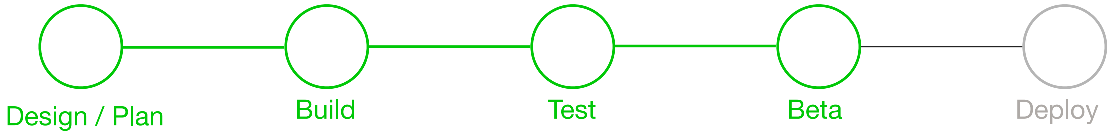
So far I think the product was a **success** due to 2 key factor -

The planing.

If it weren't for the planning the development would have been all over the place causing the overall efficiency to go down and maybe a failed launch of the product.

Testing.

The rigorous testing was another important factor as to why certain crucial bugs were spotted and to make the code more and more bulletproof



Overall the only small negative hit we took was a delayed release date but I think this paints a good picture of how even when everything is accounted for sometimes factors outside your control can affect the project.

Risk/Success Factors

FACTOR	DESCRIPTION
User Involvement	This was a heavy factor that we had in mind and we achieved it by internal testing and researching logs
Executive Management Support	Throughout my time with the project we had as much support as you could ask for from the executives whether it was adjusting the budget or getting more team members
Clear Statement of Requirements	Before we started we had a very clear set of requirements that we wanted to achieve which gave us a great helping hand in approaching the planning of the project
Smaller Project Milestones	We made a Trello card that divided the entire goal into 23 different and smaller milestones which definitely helped boost the morale of the team
Hard-Working, Focused Staff	Everyone on the team was not only hard working but also knew how to communicate well and in a timely manner which made the project more fun