

# Implementing a REST API for Custom Metrics

## Synopsis:

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## Technical Skills:

There are many technical challenges such as learning the new tech stack, writing readable and quality test cases, and understanding the system/codebase. The best way for me to overcome these challenges was by learning how to use the debugger. I learned how to “throw a debugger” everywhere and use that to both debug and understand the existing software. I realized that debugging is actually its own valuable skill itself, and I believe I learned how to debug much better. I also learned how to create a technical design that will outline my “plan of attack” for the project.

## Description:

My project was to design and implement a new Custom Metrics feature. Custom Metrics allows a user to create their own unique metrics with binary operations.

## Personal and Professional Growth:

Some of the best personal and professional growth I gained was learning how to collaborate with different team members in different time zones. Moreover, I also learned how to reach out to engineers outside my team for expertise. For instance, I wanted to try Test-Driven Development (TDD), but don’t have any experience in it, so I reached out to an engineer who wrote a document about his take on TDD. I set up a sync with him and learned some valuable details before I try TDD. Another great skill I picked up is on how to prepare thoughtful questions before I set up a sync.

## Ethics & Society:

This project will help the user analyze their stats for their campaign with more custom methods. This allows the user to potentially identify strengths and weaknesses with their campaign and modify their flight accordingly. This helps build an ad that will better fit their target audience.

## Connection to UCSD:

There are many courses that helped me along the way:

1. CSE 110/112: This class taught me how to work in a team and build a project from scratch. I learned about CI/CD, TDD, AGILE, etc and problem solving from a software development perspective
  2. CSE 120: This class helped me learn how to problem solve and debug to understand the operating system
- Coming back to UCSD, I feel a lot more confident in my ability to self teach and adapt. Moreover, I feel that I will be able to handle future programming assignments