

**Navigating the Future: Exploring the
Power of Google Maps API for
Location-Based Services and Applications**

Spring 2023



**CS 4000: Individual Studies in Computer Science – Exploring Google Maps APIs and Its Map
Extraction Technique**

For my individual studies project, I was assigned a task in which I explore Google Maps API for location-based services and applications. It has been a genuinely eye-opening experience. My studies have taught me a great deal about the power of APIs and their potential to change the way we engage with technology.

I investigated the huge selection of tools and capabilities available through the Google Maps API. This API genuinely provides an all-encompassing solution for mapping needs, from geocoding and routing to real-time traffic updates and place searches. In the weekly meeting, I was excited to hear from Professor. Lim about the potential use of API in the real world and its important roles in a variety of occasions. He always made sure to encourage me to challenge tasks and impressed me with the related work I could achieve with this simple but sophisticated technique. Despite the difficulties, I believe that my research of the Google Maps API was beneficial. I learned about the API's numerous features and capabilities, and its variety and breadth of applications. I also gained a better understanding of the significance of extensive planning and meticulous project management. I am eager to continue working on this project and put the things I have learned to use.

Finally, I want to express my gratitude for the chance to work on this project, as well as for Professor's direction and support throughout. Although I faced many difficulties and challenges throughout the semester, I feel that the skills and this research experience itself I obtained will be useful to me in my future studies and profession. I'm looking forward to continuing to work on this project and honing my abilities using the Google Maps API.

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