Lab 2 Literature Review: Microservices at Uber

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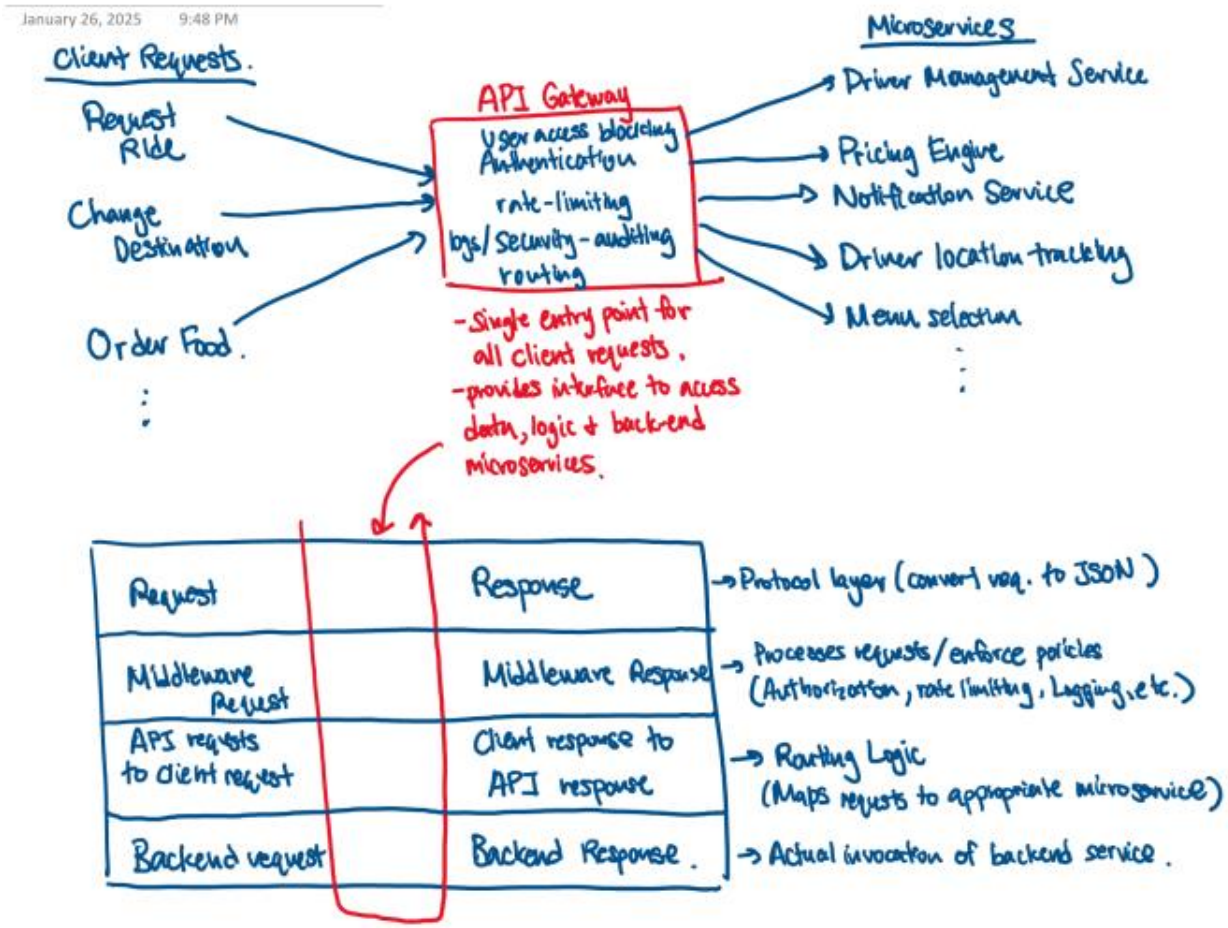


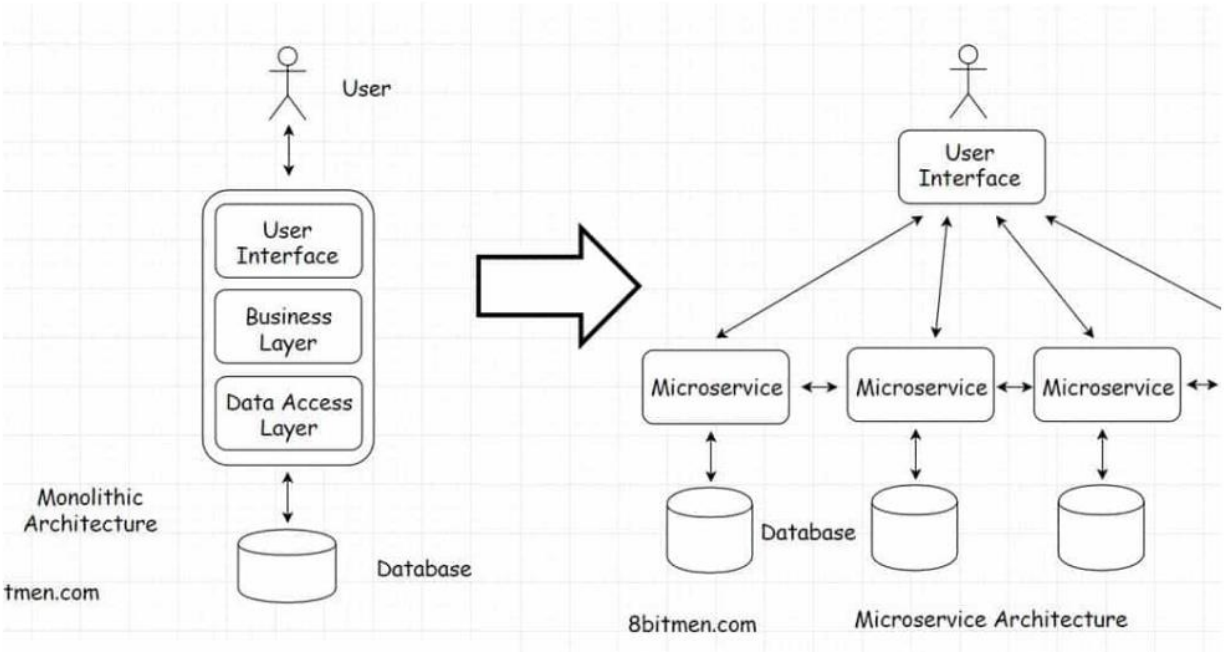
2. Some microservices at Uber includes services such as driver management, notification, and pricing engine.

3.

As Uber grew to become prominent method of transportation, issues began to arise regarding its monolithic architectural design, due to the difficulty of handling the ever-increasing number of user interactions and ride requests. To address these issues, Uber has adapted a more modular and scalable approach, by using the microservices paradigm that many other companies at the time were implementing.

There were still advantages of a monolithic architecture. Developing, testing, and deploying an application was still much easier using a monolithic architecture, and the operational overhead was much smaller, compared to microservices. Also, the lower costs of coming from smaller infrastructure and not having to have a wide variety of tech stack would've been a significant factor in not wanting to switch to a complex architecture like the microservice architecture.

However, to match the explosive growth of Uber, adapting the microservice architecture was going to be the more scalable and give Uber the platform to thrive even more. As each service can be scaled independently based on demand, Uber would be able to work on multiple different projects at a time, with different pace. Also, as code base would become more modular and divided, fault isolation and error spotting become not as critical compared to a monolithic structure. Teams can choose the best programming language to implement specific services, which optimizes performance and efficiency.



References

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