ANSWERS CHALLENGE

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1) CASE

- 1.1) I can count on 5 pieces of software:
 - Customer Mobile App: User oriented browse, order, track delivery
 - Delivery Staff Mobile App: Delivery staff oriented receive orders, update status
 - Delivery Staff Web Dashboard: Delivery staff oriented Management, analytics, reporting
 - Backend API: Main Software oriented handling data to the database
 - Database: Stores user information, order details, all the information
- 1.2) I would start with a monolithic architecture for its simplicity, faster prototyping and dynamic testing.

As the project matures, transitioning to microservices architecture becomes necessary. This will allow scaling and scalability, since microservices facilitates independent services and functions.

- 1.3) The context of delivery apps demands high amount of tests, from different perspectives and components. For this reason, SCRUM would be appropriate to manage the development of the software while having frequent adjustments and feedbacks from many areas.
- 1.4) I have worked with this pattern and I am confident it will suit well the context creating feature branches for new features and implementation and integrate them to the master branch while it has been tested and is working well.
- 1.5) During the development of the prototype I see a necessity of a Tester or a Quality Assurance Engineer. In this context, the Software will need many testing and testing phases, grating quality and reliability to the team and company.
- 1.6) I would mention the necessity of 3 components Documentation, automated testing and analytics. Technical documentation, given the context as an emerging business, many others projects will come we need to gain time having lessons learned and all other possible information. Automated testing since there are going to be many. Analytics, so that the Al and Machine Learning Team can thrive in this context.