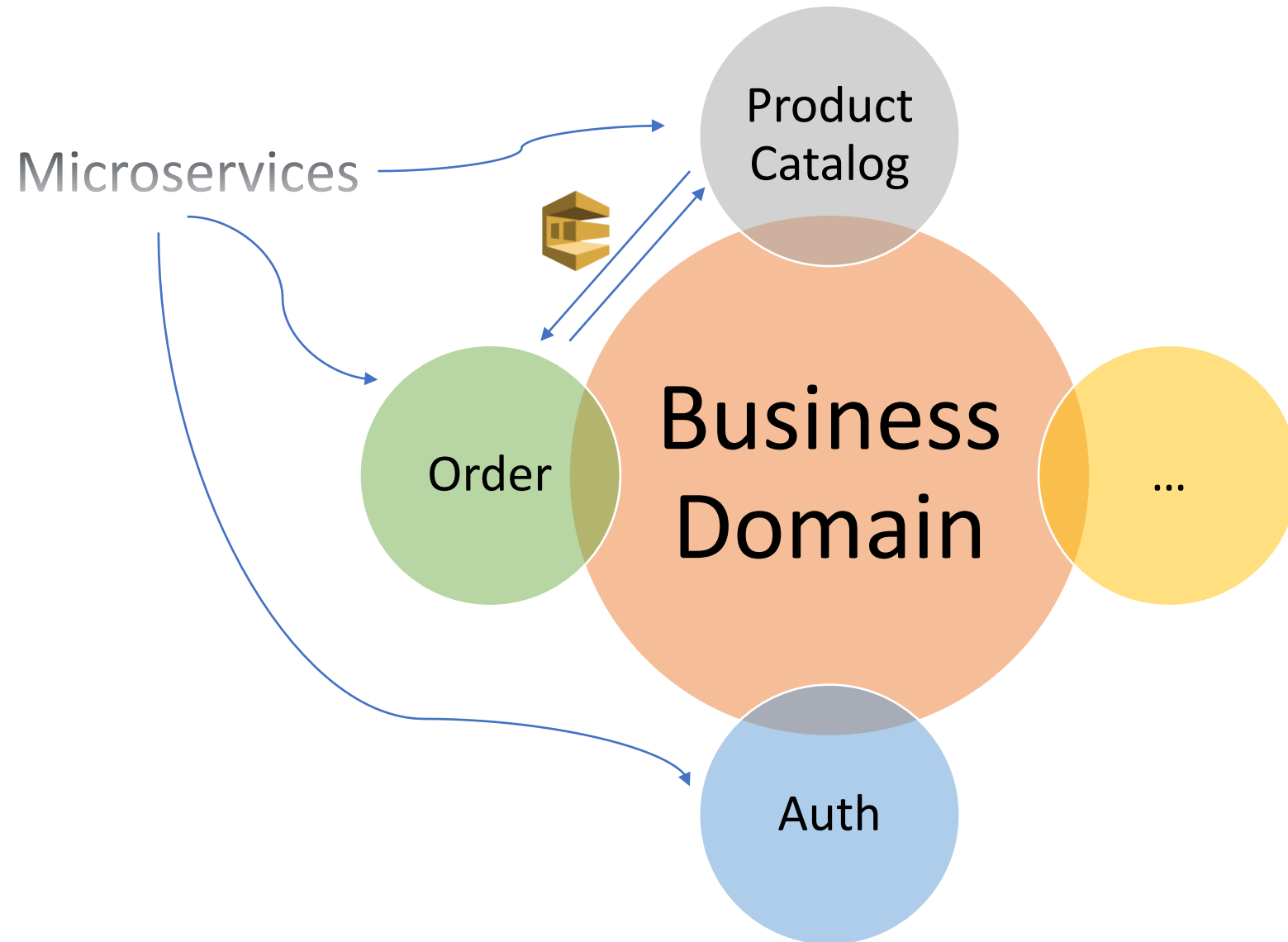# High Level Architecture

Outputs

- A high-level solution diagram for the components. [Done]

- Entity relationship diagram for the database. [To be faster and save time, I only have one entity: Product and keep data of products list in memory. Can extend to MySQL or MongoDB if necessary]

- Example implementation for some business workflows of the backend services. [I implement one of intended microservices: Product service. User can get the list of products, search, filter, sort and paging. Moreover user can create, update and delete a product]

- A Readme file explains: [Done] README.md in the repository
  - Brief explanation for the code structure.
  - All the required steps in order to get the applications run on local computer.
  - CURL commands to verify the APIs.

- You should commit your solution to a publicly accessible source control site (eg. Github or GitLab). [Done] the Github link

- Please complete your working solution within 7 days of receiving this challenge. [I spent 8-12 hours to complete]

Extra outputs

- APIs document with Swagger

- Unit tests with Mocha

- Demonstrate different styles of microservices communication
  - Call APIs of Auth service. (services/auth/auth.js)
  - Send message with Amazon SQS to Order service. (services/order/order.js)

- Classes and inheritance (Architectural/OOP)

- Functional programming (Closure)