

## ASSIGNMENT 2 – REST & ECOMMERCE SYSTEM & VP TOOL

25/02 (CLC) 27/02 (CQ): Version 1 (discussion)

04/03 (CLC) 06/03 (CQ): Version 2 (mark)

USING VP FOR DESIGNING E-COMMERCE SYSTEM WITH THE MICROSERVICE MODEL

- REST
- E-COMMERCE
- VP TOOL

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- 1 **(8 pages)** REST (write 8 pages with 3 examples): what is REST? Why do we need to use REST? Steps for building REST in Django? What is serialize? Why we need it?...Using VP for representing REST

### Guide to design API

[https://www.visual-paradigm.com/support/documents/vpuserguide/276/3420\\_generatingre.html](https://www.visual-paradigm.com/support/documents/vpuserguide/276/3420_generatingre.html)

<https://www.visual-paradigm.com/tutorials/rest-api-example-simple-registration-service.jsp>

### Guide to code

<https://www.django-rest-framework.org/tutorial/quickstart/>

<https://blog.logrocket.com/django-rest-framework-create-api/>

<https://medium.com/@ahmalopers703/getting-started-with-django-rest-api-for-beginners-9c121a2ce0d3>

<https://www.geeksforgeeks.org/how-to-create-a-basic-api-using-django-rest-framework/>

<https://www.moesif.com/blog/technical/api-development/Django-REST-API-Tutorial/>

- 2 **(17 pages)** Design an e-commerce system in Django completely with modules/services: customer, cart, order, shipping, paying, items such as book, mobile, clothes, shoes...
  - Customer owns 4 types with the corresponding functionality
  - Each modules owns at least 7 functionalities
  - Customer is designed with mySQL
  - Items book, mobile, clothes, shoes...are designed with MongoDB
  - cart, order, shipping, paying are designed with PostgreSQL
  - a. Draw use case diagrams in VP for describing functions of each module
  - b. Draw class diagrams in design for each module. Class includes attributes and methods and relationships
  - c. Show connections in REST we need to build and use VP tool to interpret
  - d. Code the modules of the system