Software Engineering and Design

An online music retailer has decided to create a new service product. Customers will be able to pay for electronic “gift tokens” (of any value). They receive a short identification code that they can send to a friend by email. When the friend receives this code, they can visit the company website and use it to purchase MP3 tracks up to the specified value. Any remainder stays in an account that the recipient can use later.

Demonstrate your understanding of the Unified Modeling Language (UML) and associated design process, by sketching four different types of diagram that could be used in the design of the above service. For each diagram, explain what purpose this type of diagram would have within the design process. [5 marks each]