Analysis and Design Unit – Evidence

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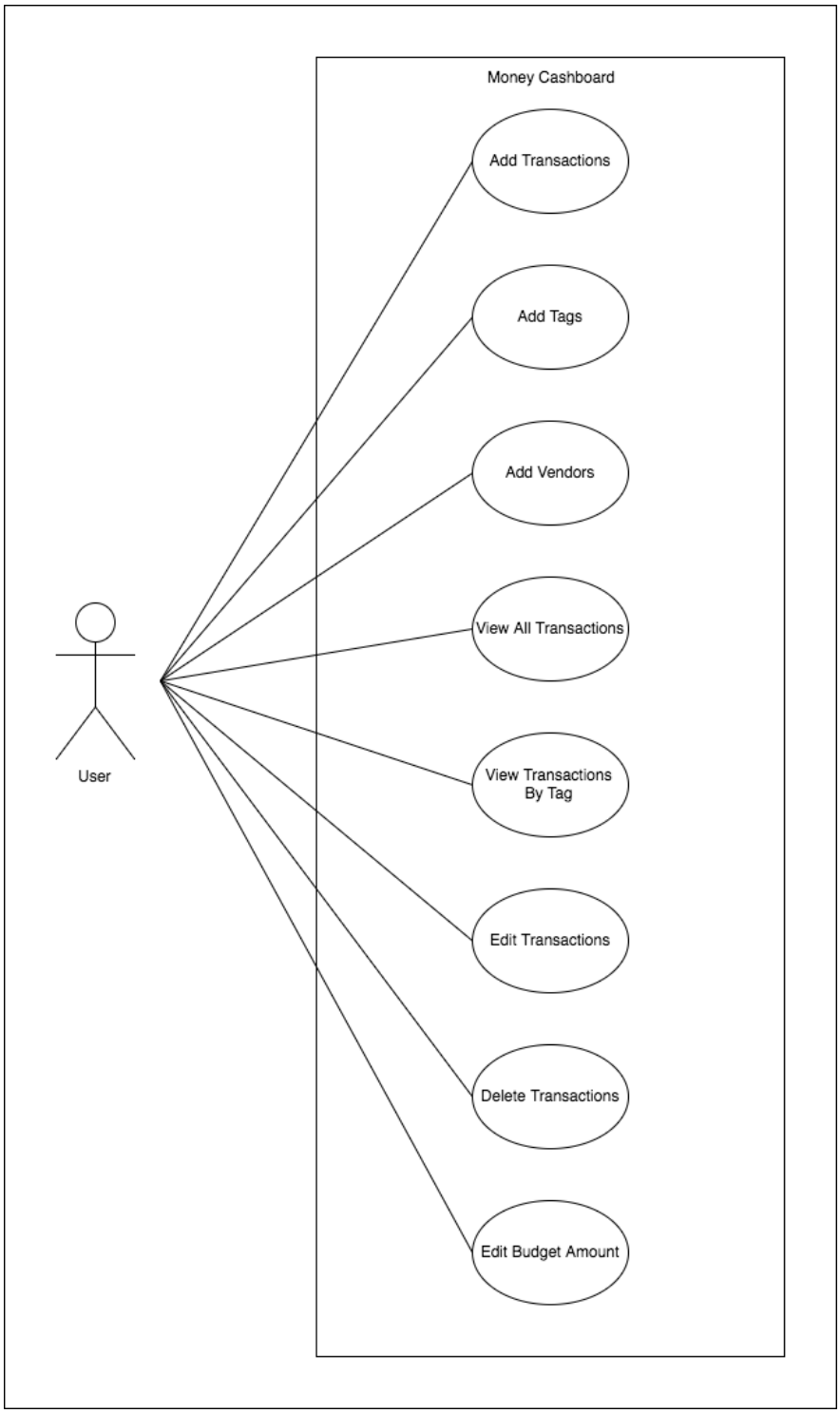
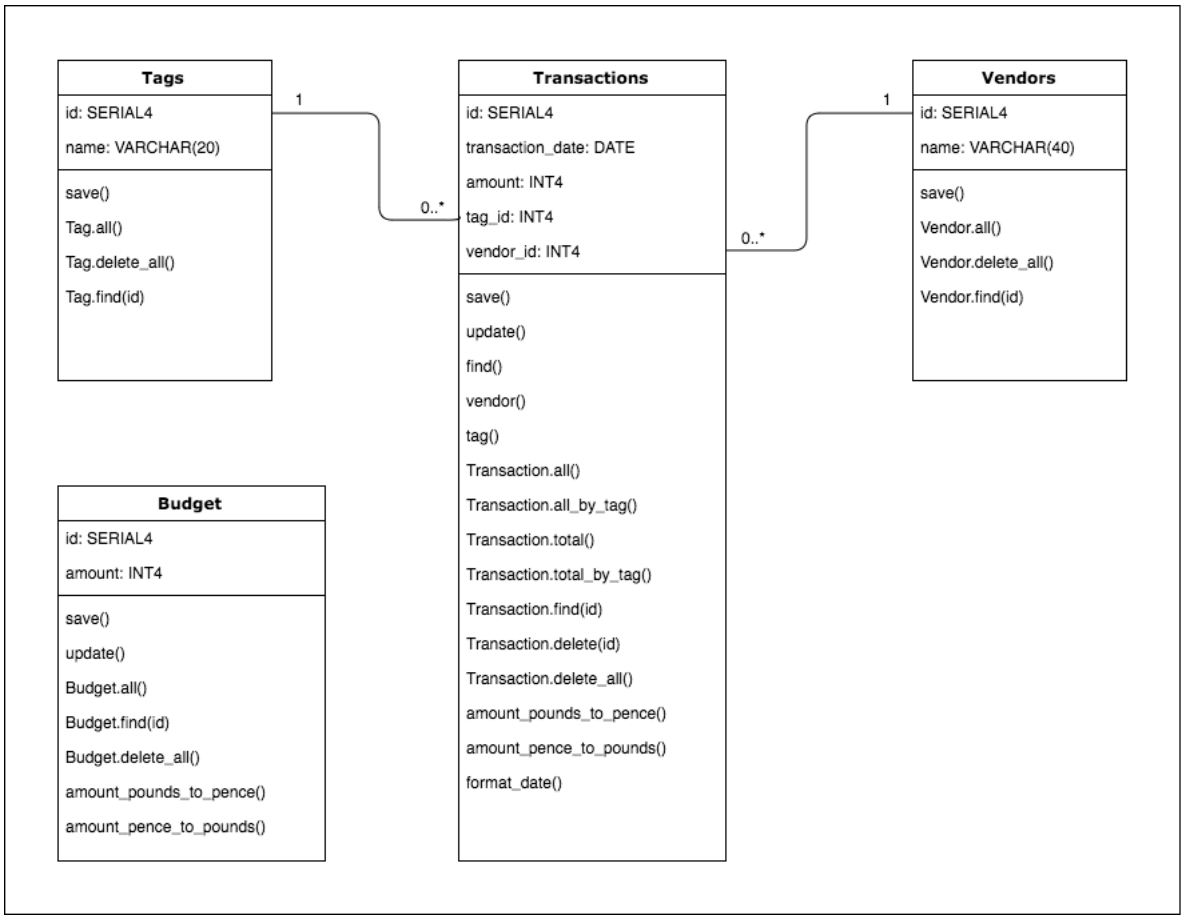
Cohort E18

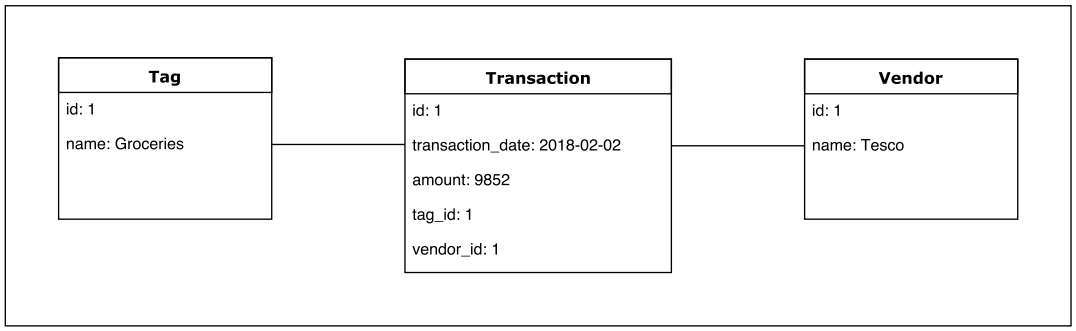
A.D. 1 – Use Case Diagram



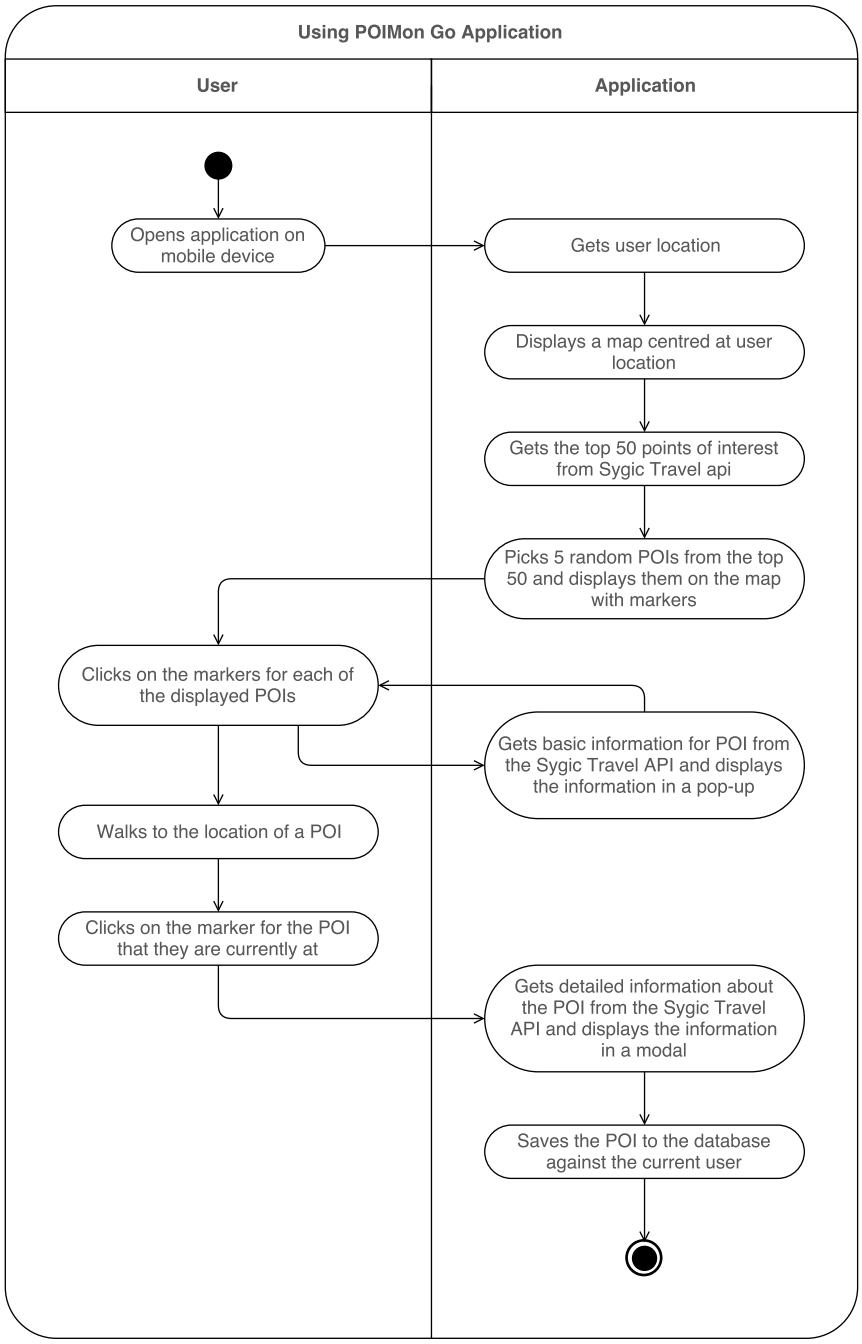
A.D. 2 – Class Diagram



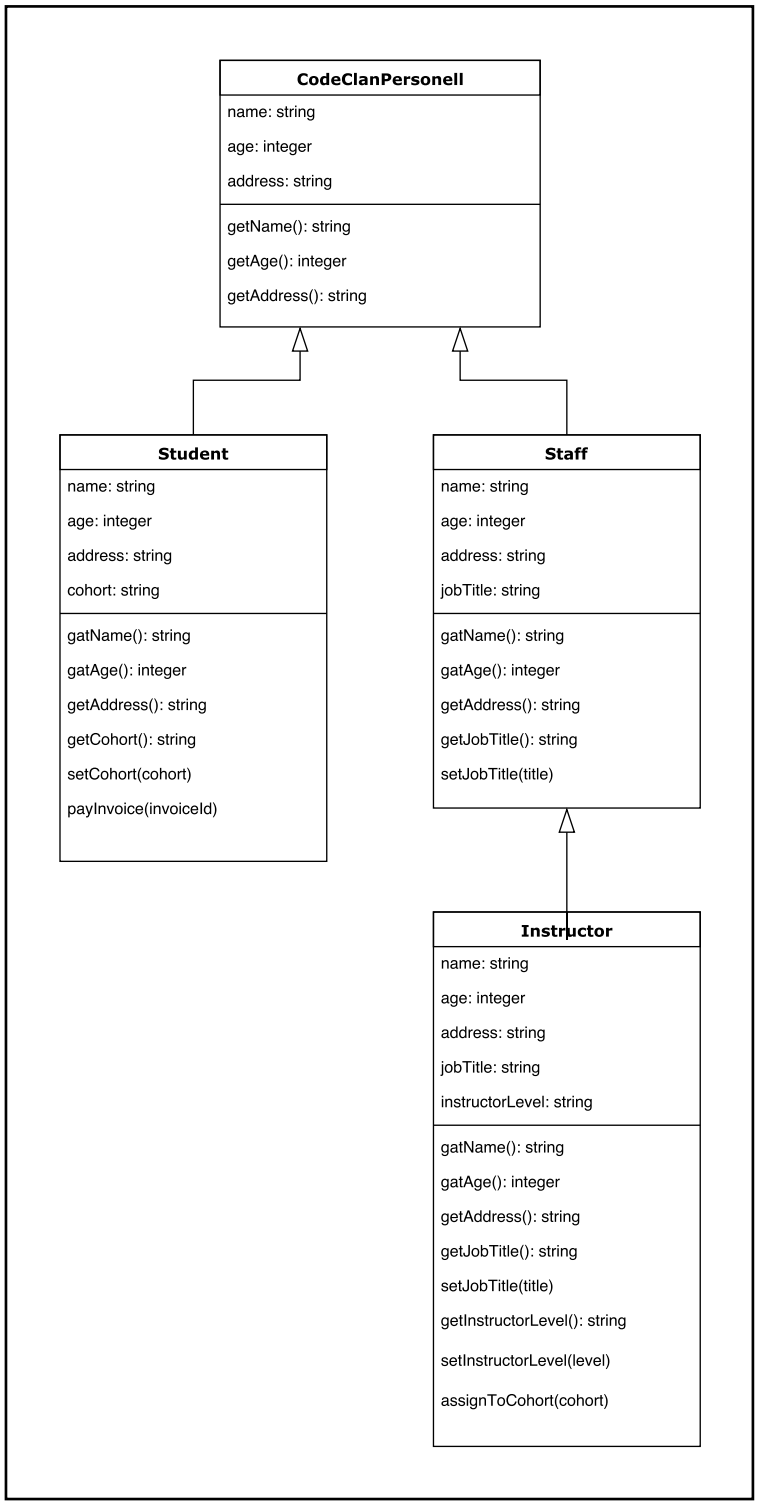
A.D. 3 – Object Diagram



A.D. 4 – Activity Diagram



A.D. 5 – Inheritance Diagram



A.D. 6 Implementation Constraint Plan

Topic	Possible Effect of Constraint on Product	Solution
Hardware and Software Platforms	The application can only be hosted on Windows based servers. This limits the hosting options for the application. This could mean that costs or other considerations for hosting services may not be as flexible as they could be.	Ensure that the application is developed to allow it to be deployed to any operating system and ensure that the selected could services implementation allows deployment to any operating system.
Performance Requirements	The number of users of the application may vary significantly at different times. The application must be able to cope with differing levels of user numbers at different times. If load balancing is not implemented correctly, users will experience delayed loading times of the application.	Ensure that the application is hosted on cloud services servers with the correct load balancing implementation.
Persistent Storage and Transactions	The application will only work with Oracle databases. This limits the hosting options for the application. This could mean that costs or other considerations for hosting services may not be as flexible as they could be.	Ensure that the application is developed to allow it to work with any relational database and ensure that the selected cloud services implementation has access to any relational database instance.
Usability	The user experience of the application may not have been considered when designing the user interface. Users may not be able to experience using the application in a way that suits them. This could lead to reduced user uptake of the application.	Ensure that good user experience design is fully considered and documented when designing the application and ensure that the documented UX rules are fully implemented in the application.
Budgets	The available budget may reduce the options available for hosting the application. This could mean that other implementation constraints, such as performance requirements, are not fully mitigated. This could lead to the application being hosted on servers that are not adequate for the anticipated user load.	Fully investigate and document all cloud hosting service options to ensure that the budget is set such that it does not impact other implementation constraints.
Time Limitations	Long deployment times will lead to down-time of the application. Long down-time of the application will lead to customer dis-satisfaction.	Ensure that the selected cloud services implementation allows for deployments that are invisible to the end-users.