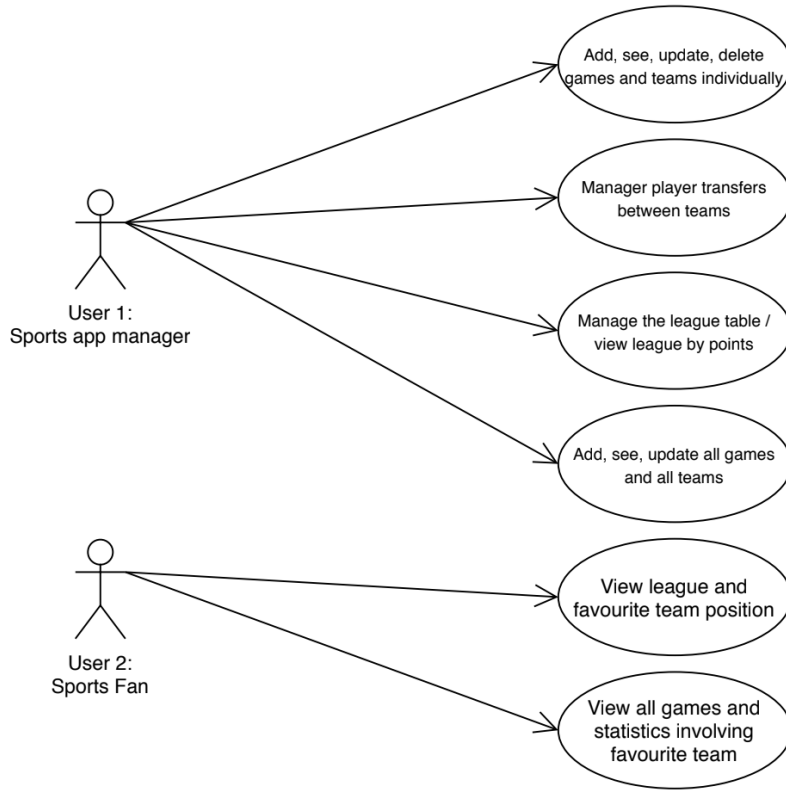
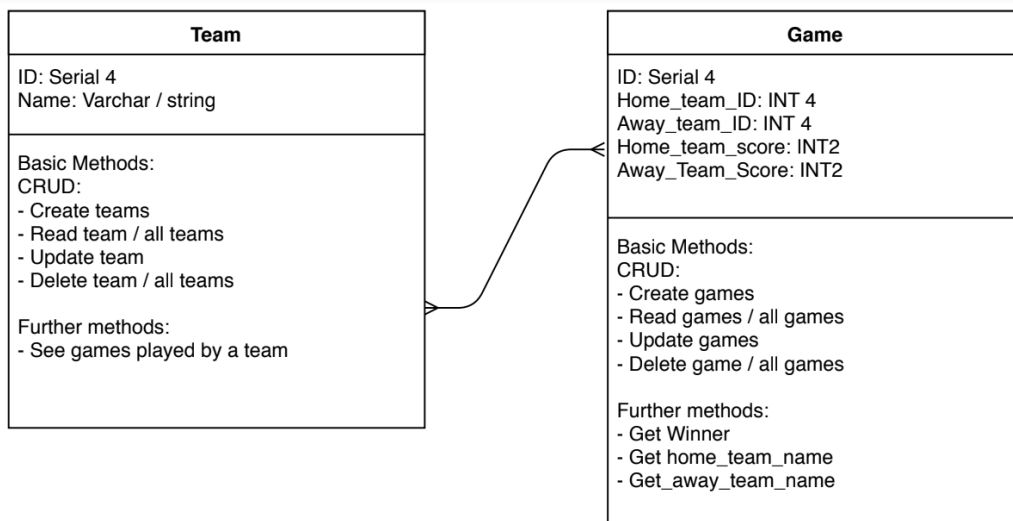


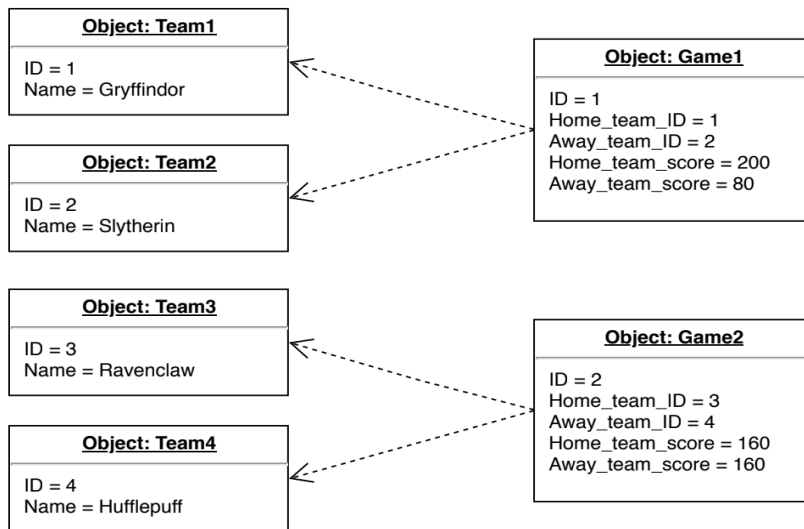
A and D 1. Example of a use case diagram



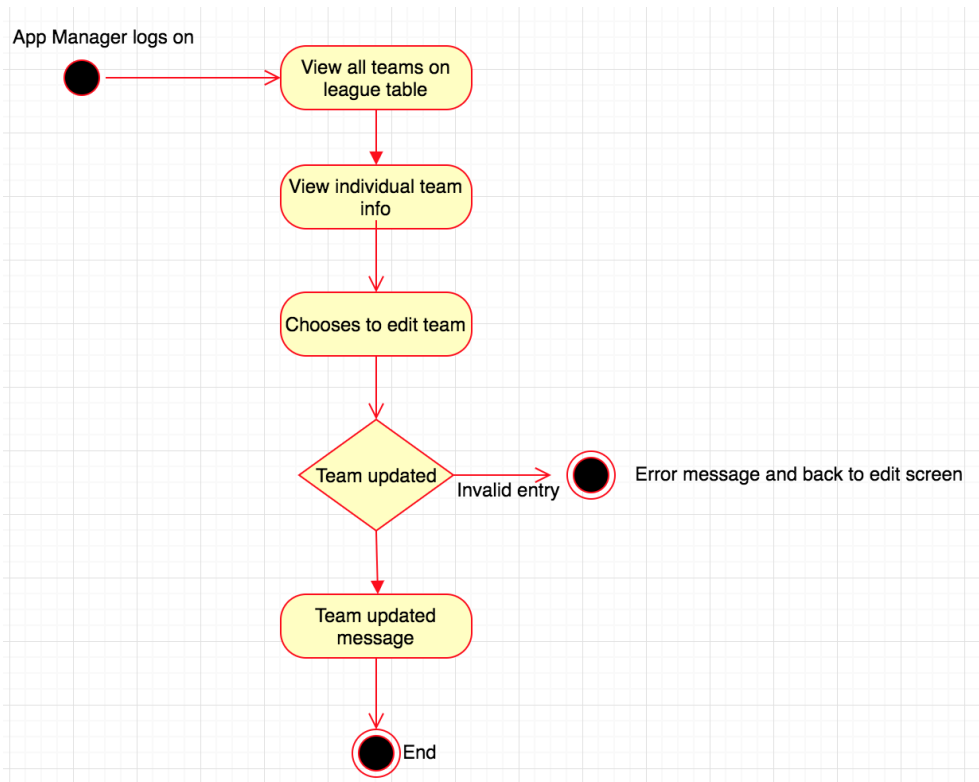
A and D 2. Example of a class diagram



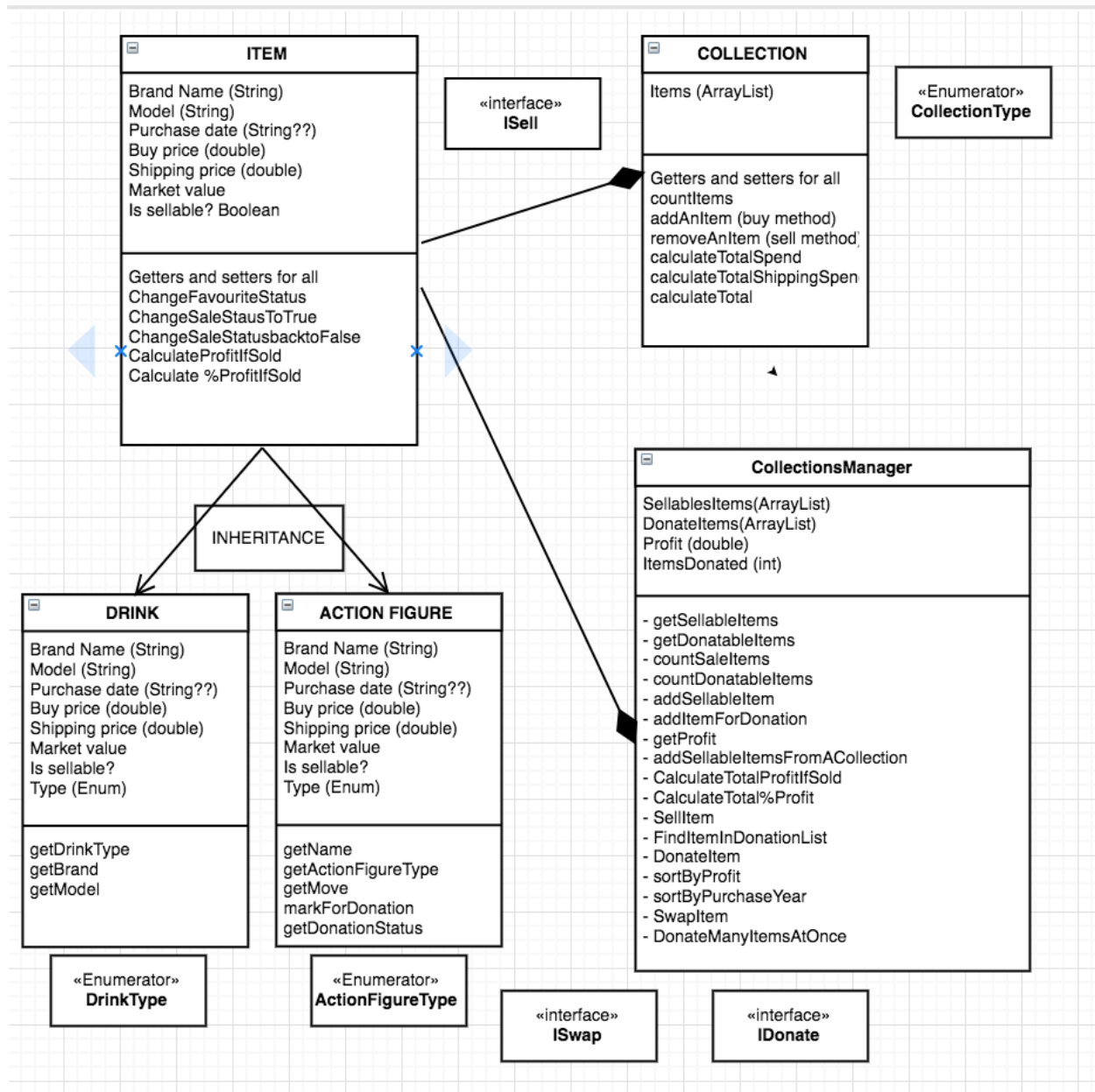
A and D 3. Example of a object diagram



A and D 4. Example of a activity diagram



A and D 5: Example of an inheritance diagram (within a class diagram)



A and D 6: Example of Implementation Constraints Table

	Constraint and possible effect	Solution
Hardware and software platforms	<ul style="list-style-type: none"> Only allowed to use apps / languages used since week 1 May mean that front end is not quite as intuitive or as pleasing on the eye as it might be 	<ul style="list-style-type: none"> Code front end in css/html in absence of Javascript Focus on functionality rather than features / looks

	<ul style="list-style-type: none"> • This will impact the user experience, especially as the modern user requires an interactive, intuitive experience 	
Performance requirements	<ul style="list-style-type: none"> • Limited processing power as only local machine • Large amounts of data may take a long time to seed and/ or persist • Potential impact on user experience as there will be slowdown of application processes 	<ul style="list-style-type: none"> • Only small amounts of data and small amounts of code to be used to avoid slowdown • Minimise unnecessary features as these may require persistence of too much data
Persistent storage and transactions	<ul style="list-style-type: none"> • As above, limited processing power on local machine means that local database may persist large amounts of data slowly • Large amounts of data may take a long time to seed and/ or persist • Potential impact on user experience as there will be slowdown of application processes 	<ul style="list-style-type: none"> • Only small amounts of data to be stored • Avoid using an API with high volumes of data to be seeded - only use locally seeded database
Budgets	<ul style="list-style-type: none"> • No budget whatsoever • This could have an impact as we will be limited to free online tools and free frameworks • Using free tools all the time could have performance issues down the line, especially if there is a time-limit on use of free software/tools • Use of less than optimal software can make development a lengthier process - meaning time added on for the customer 	<ul style="list-style-type: none"> • Free software to be used and practiced with as much as possible before creating the customer project • Only use tools which are widely used and for which there is a community edition
Time	<ul style="list-style-type: none"> • 7 days for project from conception to presentation • May not have enough time to implement all desired features • May not manage enough iterations of the project to provide the highest quality product possible • Customer experience could be adversely affected if product is not fully finished / tested 	<ul style="list-style-type: none"> • Effective planning and time-management • Focus on important functionality only • Minimise time spent on fancy features / styling • Test Driven Development, to make sure that any functionality which is implemented, is tested thoroughly and works well.