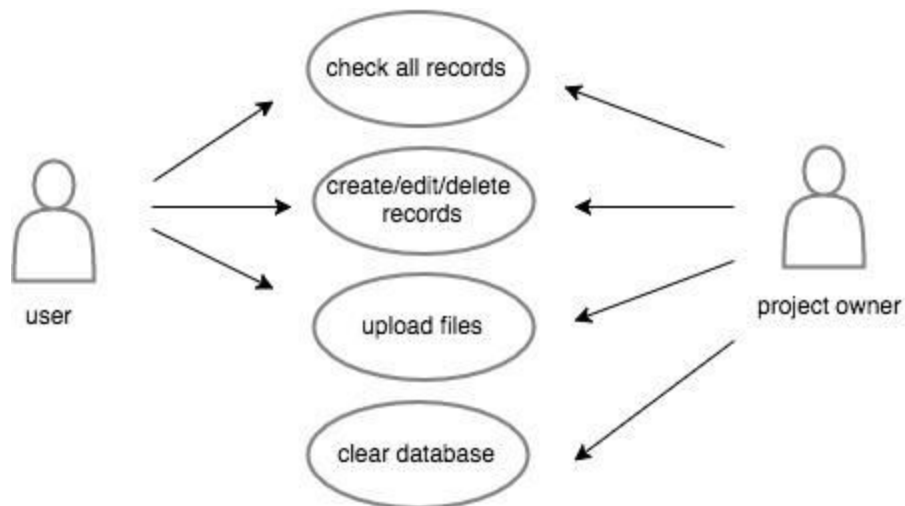
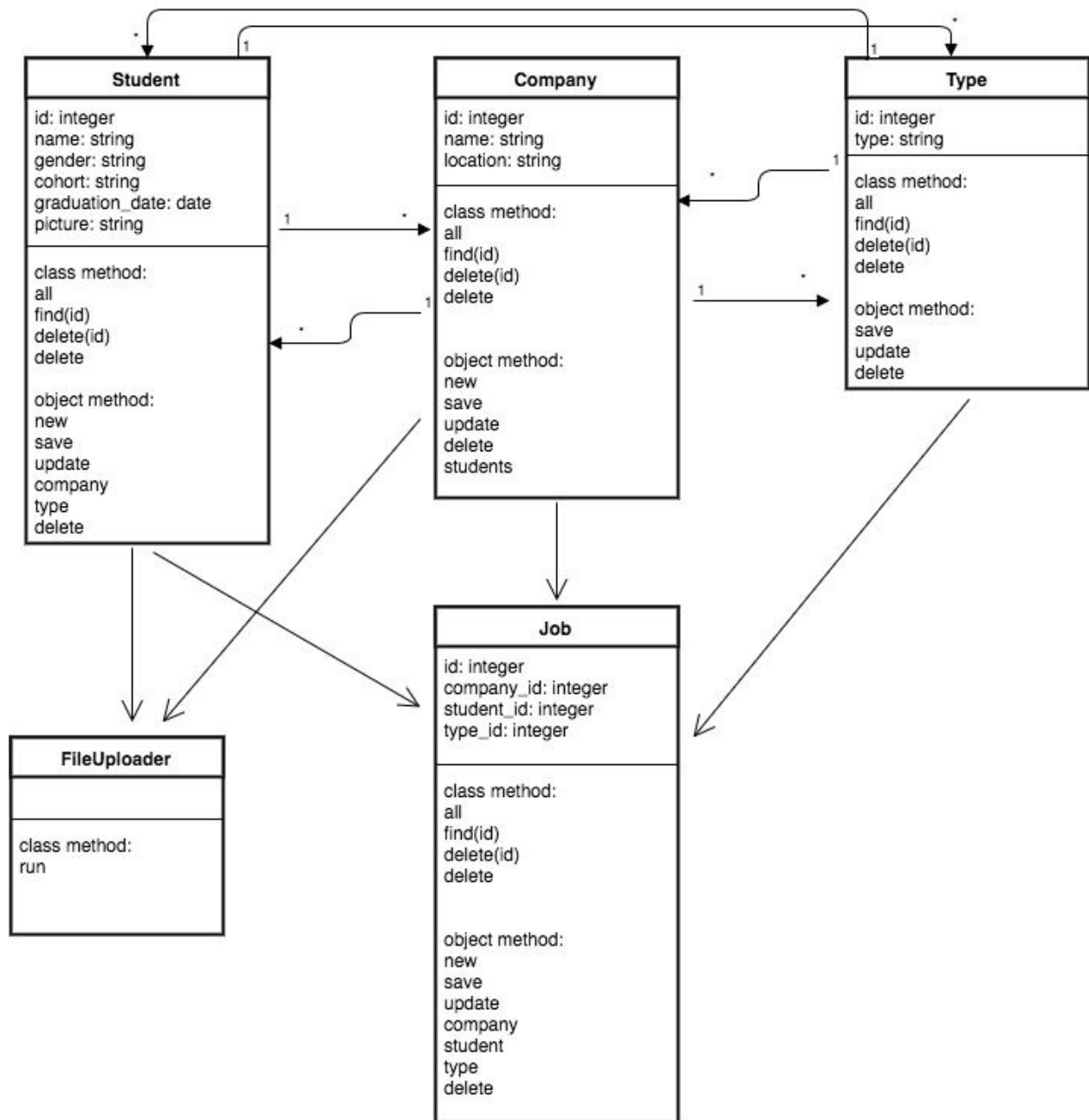


**Analysis and Design Unit**  
**SQA PDA: Software Development**  
**Yan Ren**

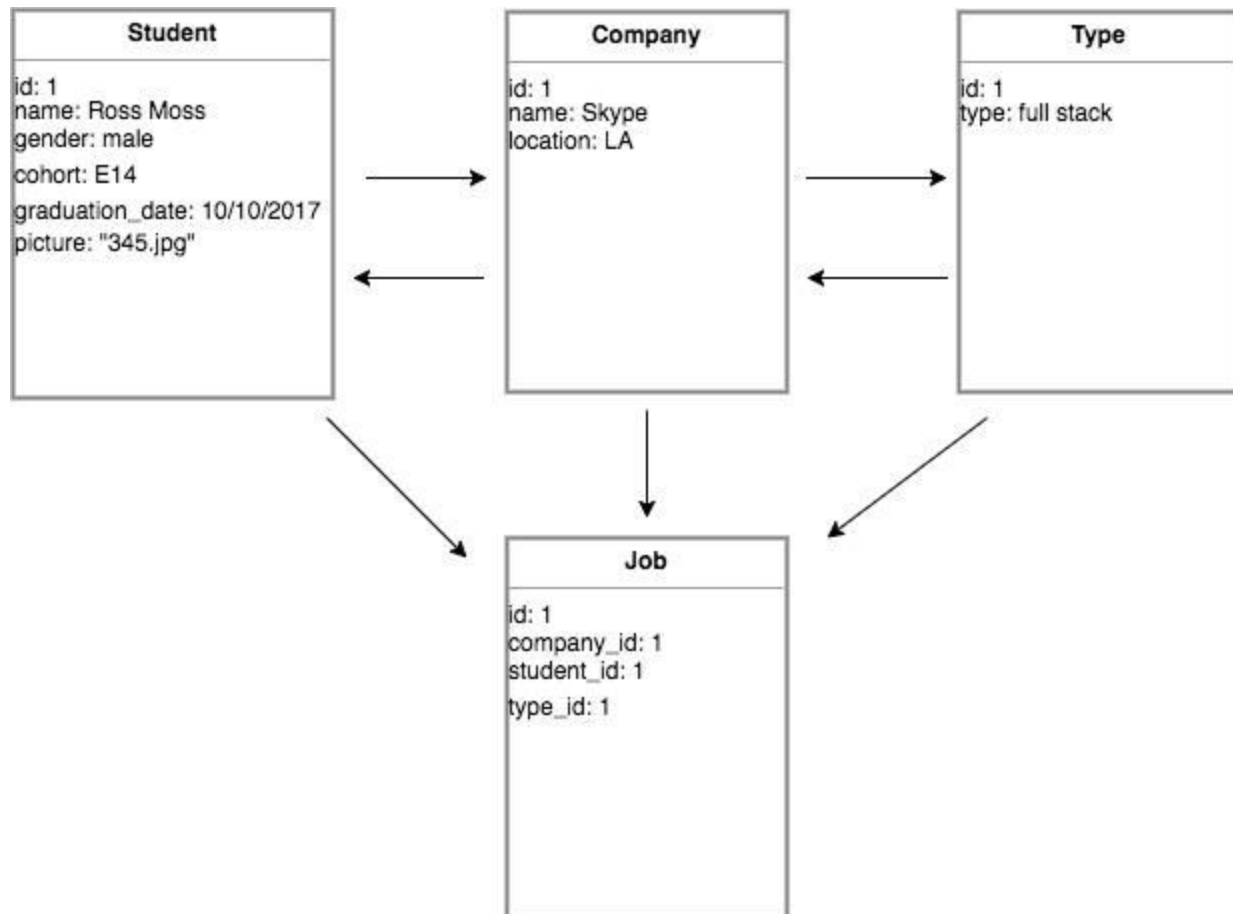
**AD1 - Use Case Diagram**



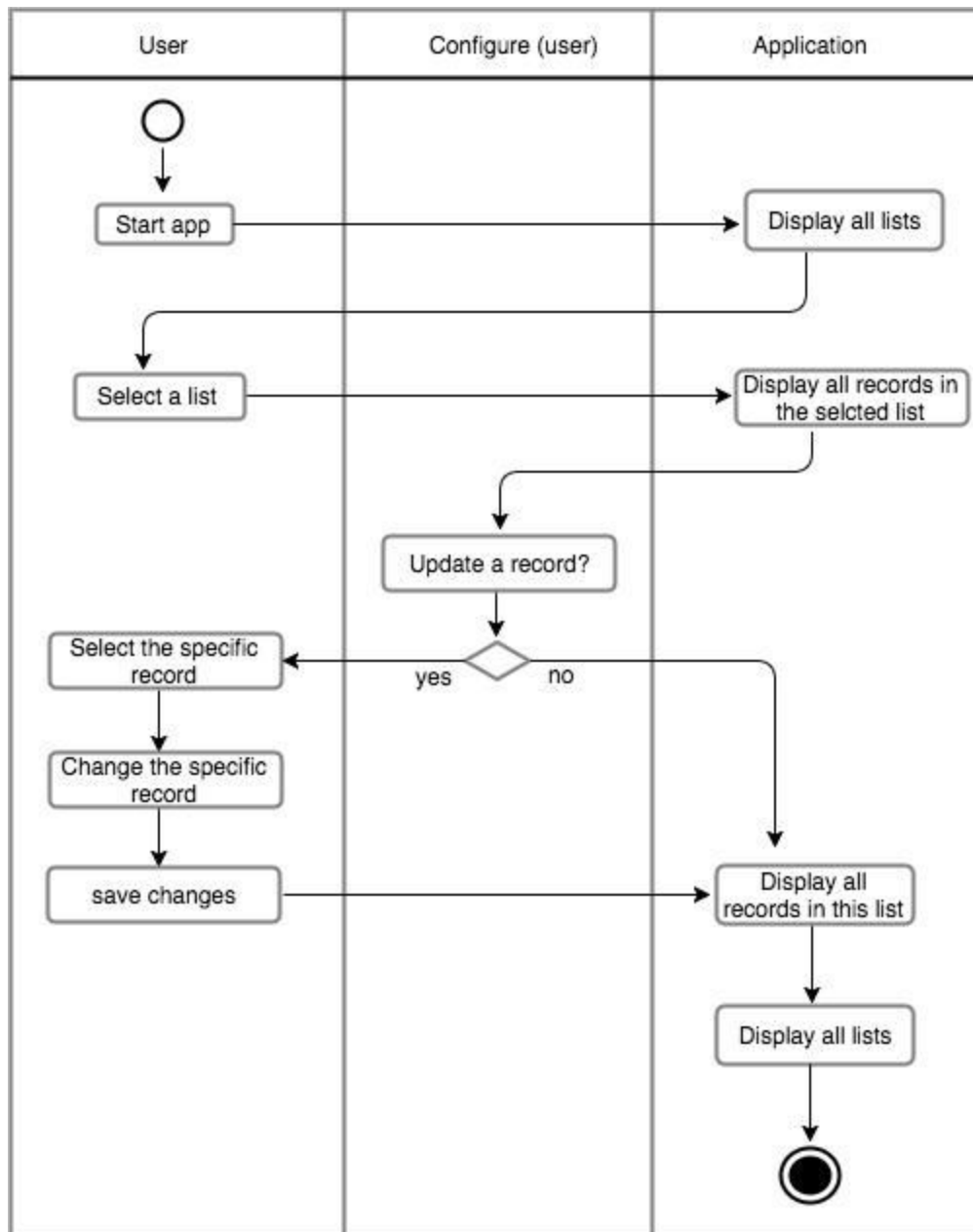
## AD2 - Class Diagram



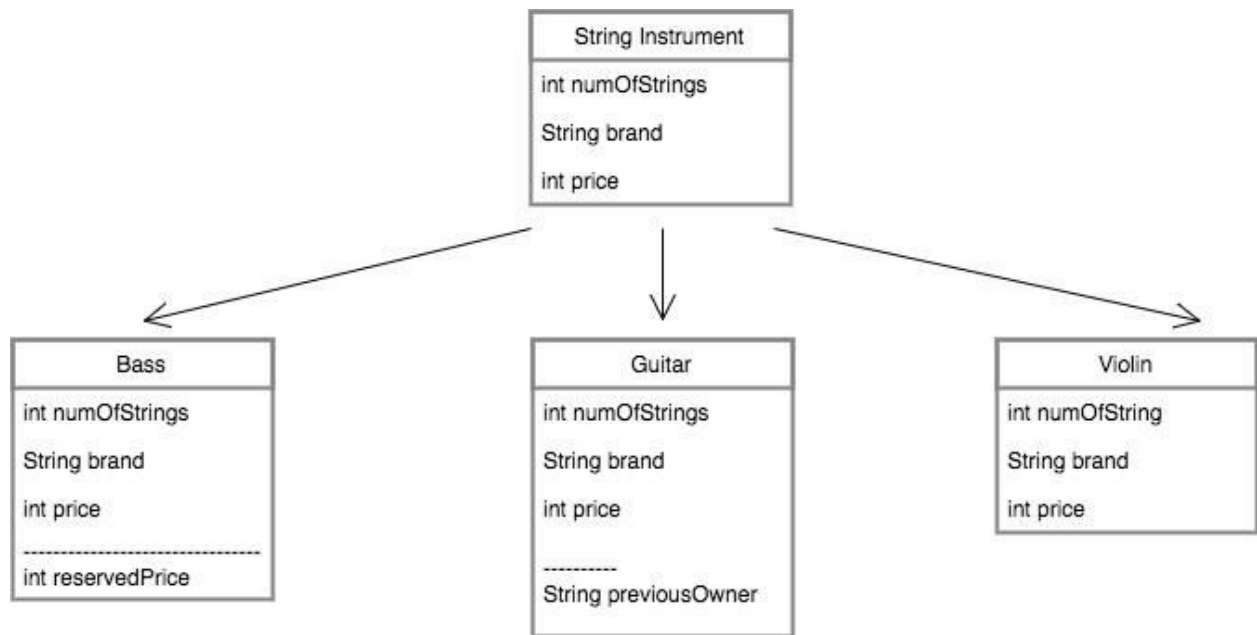
### AD3 - Object Diagram



## AD4 - Activity Diagram



## AD5 - Inheritance diagram



## AD6 - Implementation Constraints Plan

Topic	<b>Possible Effect of Constraint on Product</b> <ol style="list-style-type: none"> <li>1. Of the product</li> <li>2. On the Product</li> <li>3. Why is it a problem</li> </ol>	Solution
Hardware & Software Platforms	3D effect is not always available on all devices; if the designed application has only 3D image as choice, some of the users will not be able to use it in full	Have both 2D and 3D effect available for choice at the same time.
Performance Requirements	If the server used is slow, it will have an effect on users' downloading speed. If it is slower than the competitor's application downloading speed, users retention rate will go down.	Optimise the server speed by upgrading the server and if possible have different server in different region to speed up the download speed.
Usability	People who are color blind (e.g. not able to differentiate red and green) will not enjoy a website which is dominant by the color of red and green.	When design website, designers should be aware of the issue and test choices of color with potential users. Make sure the user experience is not affected by the choices combination.
Budgets	Underestimating the cost and length of the design process might stretch the budget too thin. And later on it might affect the implementation. If there was no more funding or no sales, the project would be in trouble.	Always looking for more contingent funding solution; Estimate the cost with the potential changes in mind so that it would not go bust before the project ends.
Time limitations	The estimated time for finishing the MVP is now under pressure due to the fact that half way through the design some functions that are not necessarily part of the MVP are brought in..	List the MVP requirements and stick to it. If changes need to be made, the estimated finishing time will have to be adjust accordingly too.