In this report will contain information of how we designed the start of the BUCKS Centre for the Performing Arts (Design & Implementation). The first section we designed was the three use cases which were designed by Hassan Nisar (22011971). He used Visual Paradigm Community Edition, the reason he used the Community Edition was because he used the 16.3 Evaluation Edition for another module and the 30-day trial had run out also, the apps anywhere Visual Paradigm was not working so he chose to use the Community Edition. He started making the Use Cases by looking at the assignment brief and listing down what each Actor does such as the Consumer, Venue Manager, and the Ticket Agent. After he made the list for each Actor, he done implemented every action they had done into three different Use Cases. After each Use Case he had opened the specification for each one and wrote a description as the Use Cases contain 5 or less words, another individual looking at the Use Case will find it hard to understand so he made a description for each Use Case which he also put into a Word Document.  
  
The next segment that was looked and was a part of the Use Cases was the merging of the Use Cases, this was done by Hassan Nisar. Hassan first took all three Use Cases and laid them all out on a new Diagram, he came across an issue when merging the Use Cases as he could not simply import and export the already made Use Cases on to another diagram, he had to remake all the Use Cases again on to one diagram, this was not his fault as the software the team was using was not very helpful for this task. After, laying out all the Use Cases he then looked at each Use Case and found which Use Cases were similar, could be changed to be similar and the ones that were completely different. The ones that were similar was all Actors had to access the Online Ticket System this could be normalized and instead of three Use Cases for accessing the Online Ticket System it was normalized into one where all three Actors were related to. Some use cases could be seen as similar as the Ticket Agent had to confirm the seat as purchased and the Consumer had to purchase the seat, Hassan tried to make the Use Cases as similar as they could to allow normalization but was unable, so he normalized as many Use Cases as he could.  
  
The Second feature which Haroon Sadiq took responsibility for was the Class diagrams, this task had a bit of everyone’s hand in it as the classes found in the study case was done by Hassan, the diagrams were generated by Haroon and the data inside the classes was described by Mauro which is another task in itself. To start of making the classes Hassan done a process called Noun Identifying this allowed Hassan to look through the Case Study and Identify the Main Nouns that were used to construct the BUCKS Centre for the Performing Arts. He ended up with nine nouns that were made into classes to begin with and was handed onto Haroon.

In the halfway point of making the Class Diagrams, Mauro Nunes took the responsibility of generating a Data Dictionary for the Attributes in each class, he had the idea of doing it in between as if he had taken the responsibility at the end, it would have taken him a long time to complete so if he had started it all he needed to be doing was updating it with the new attributes. He decided to generate the Data Dictionary in Word as making a Table is simple in Word and he included the attribute, the type such as integer or string and lastly, the actual definition of the Attribute.

The team met up with each other every Monday from 2pm to 3pm and then every Friday from 3pm to 4pm. Those timings would be affected depending on availability. But, varying on work consumption as if less work was being done more meetings would be set up, if the work was being completed on time the team would have 30-minute meetings just letting each other know what has been completed and what must be completed next. Hassan Nisar took the role as Team Leader, so he oversaw roles and deadlines which were mostly met. The team would mostly keep communications via social media such as letting the group know what has been done and what needs to be done.