# Programming Language

In order to make this project the best that it can be, we need to ensure we select a programming language which can fulfill all of our needs. Firstly, we want use this language to develop a user interface. It must be able to access the Python based MakeHuman API.

# Option 1: Java

Java is a very popular general purpose language. Java comes with a plethora of frameworks for creating a UI. Both group members have a moderate amount of experience in writing with Java. A problem with using java would be using the Python API within a Java codebase.

# Option 2: Visual C#

Visual C# is a very popular language for creating UI’s. It has easy and intuitive methods for creating a graphical interface without much the need to set up a great deal of ground work. It requires access to Visual Studio in order to use which is readily available to the group. A problem with Visual C# is the difficulties of compiling a project for either Mac or Linux. We would undoubtedly need to come up with a work around in order to solve this problem. There is also the difficulty of smoothly using out MakeHuman API which is based on a python project.

# Option 3: Python

While not as popular as Java, nor as well suited for creating a UI as Visual C#, Python does provide several popular GUI frameworks. Additionally, Python is scripting language which lends itself well to the implementation of algorithms. This could be very beneficial in the process of converting the sample files into a data for the MakeHuman API. Additionally, because MakeHuman is made in Python, the process of using its API becomes far easier than with other programming languages.

# Final Choice:

Overall, while the only language that gives us everything we want is Python. It may not have the greatest GUI frameworks but they should be suitable for a project such as this which requires very few individual components in the interface. The easy natural compatibility with the MakeHuman API is also an excellent plus for keeping this project simple enough for a two person group.