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| **Laura Dooley**     7/14/2024   The project purpose is to predict the gender by using the height, weight, and age features using the decision tree, svc, and MLP models. | |
| Progress 1 |  |
| Progress 2 | A screenshot of a computer program  Description automatically generated |
| Progress 3 | The results on the training performance model when compared to the test mold indicate slight overfitting. The comparison of the training accuracy and the F1 score to the test model show the moderately higher values which suggest the training model There is a moderate difference in the accuracy and the F1 scores that would indicate the model is not generalizing the data well enough. |
| Progress 4 | The height model performed better than the weight model and would be the more preferred model. The height model is better than the weight because a person’s height is more a fixed variable and is not controlled by the person unlike their weight. There is more flexibility for the person to change their weight value. |
| Progress 5 | Out of the height, weight and combined height and weight features, the height was the best for training since the accuracy and F1 score were the closest to the test |
| Progress 6 | A screen shot of a computer  Description automatically generated |
| Progress 7 | A screenshot of a computer  Description automatically generated |
| Progress 8 | A screenshot of a computer program  Description automatically generated |
| Progress 9 | The SVC model was able to produce a training test that was a better fit than the decission tree model. |
| Progress 10 | The positive region of the graph is male area and the female area is the negative region. The tentative are would be the 150cm to 163 cm, and 35kg to 50 kg |
| Progress 11 | A screenshot of a computer program  Description automatically generated |
| Progress 12 | The NN model performed the best out of the 3 models. The training results had the closest values when compared with the test model. |