**Project 2 Report**

**Team Members:**

Zachariah Stratton

Pablo Vielma Jr.

Russell Pier

Shaun Fattig

Tom King

**Member task allocation:**

Zac: Inverse Kinematics / UI

Pablo: Inverse Kinematics

Shaun: Inverse Kinematics

Russell: Painting / admin tasks

Tom: Inverse Kinematics

**Project Website:**

<http://people.tamu.edu/~russell.pier/csce452/index.html>

**Project description:**

For this project we stuck with JavaFx and built on our existing codebase. We implemented the Law of Cosines to find the new X, Y coordinates for each arm after a button press. We used the .setCenter() function of each arm to position it. We used the function

to complete the triangle with which we used the law of cosines equation:

to calculate the necessary angle inside the triangle.

**Project difficulties:**

The main difficulties that we encountered was in calculating the inverse kinematics angles and coordinates. We also struggled with the paint and hold functionality. For a while it would hold, but would not stop holding.

**Interface:**

