

<p>The gloves are fashioned to be secure and doesn't hinder the player's ability to bend his/her joints.</p>	<p>Players will be able to play the piano without any hindrance or discomfort.</p> <ul style="list-style-type: none">● <u>Inspection</u>: Surveys will be conducted to gather user experience on comfort and mobility while playing the piano.
<p>The system is designed to be replicable for a piano with different key sizes.</p>	<p>The system is currently built to create a piano with 61 keys. This system can be modified to fit a different number of keys.</p> <ul style="list-style-type: none">● <u>Demonstration</u>: Alterations of the code and LED strip will allow the system to fit any keyboard size.
<p>The system provides the pianist with haptic feedback indicating which finger the pianist must use within 100 ms.</p>	<p>Players will be able to use the glove and feel the haptic vibrations. which indicates what finger they should use to play the notes.</p> <ul style="list-style-type: none">● <u>Inspection</u>: Surveys will be conducted to gather user experience on the strength, timing, and effectiveness of the motors.
<p>The system provides the pianist with visual feedback indicating which keys to press within 100 ms.</p>	<p>The user will have visual illustrations that will indicate to them what keys they should press and for how long.</p> <ul style="list-style-type: none">● <u>Demonstration</u>: Surveys will be conducted to gather information on how effective the GUI is at helping learn how to play.

<p>The system provides the pianist with auditory assistance on his/her playing within 100 ms.</p>	<p>Players will hear the song selected play while they are practicing the piano. This vocal cue allows for the users to “hear” if they are playing the notes on beat.</p> <ul style="list-style-type: none">● <u>Analysis</u>: A timer will be used to compare the length of how long the song was playing with the length of the actual song.
<p>The system is designed to have less than 100 ms of latency between the user and the system.</p>	<p>Players will be able to view/play/feel/listen to all of the systems synchronously.</p> <ul style="list-style-type: none">● <u>Inspection</u>: Surveys will be conducted to gather user experience on the latency between the systems.
<p>The gloves have a range of at least 5m.</p>	<p>After choosing all the settings on the user menu, the player will be able to move at least 5 meters away from the computer with the gloves and will still be able to play the piano.</p> <ul style="list-style-type: none">● <u>Demonstration</u>: Each member will test the maximum distance they can move away from the computer to gather average maximum distance.
<p>The gloves have a battery life of at least 1 hour.</p>	<p>The system will be able to continuously play for roughly 60 minutes without issues.</p> <ul style="list-style-type: none">● <u>Inspection</u>: Variety of songs will be played for an hour to see if the battery is still powered.