# Project Proposal Form

**Team Name:** Names Are For The Weak

**Members:** **Shayla Lunn, Tyler Duquette, JoonHyung Park, Cutler Thayer, Ethan Peterson**

**Section: 1**

Please use the following pages to give us an idea of what you would like to work on this semester. Be descriptive as possible – we would hate to turn down an awesome project or give you too hard of one because we didn't understand it!

To give the TAs time to review, please submit before Friday (1/30) at 11:59 PM. Projects approvals or rejections will be given in the following lab.

## Example of a ***bad*** proposal:

Project Description – we want to do something with the Kinect. Either a game or a motion tracker. We won't need any external libraries and we will write in Java.

*What is the project? How will you interface with the Kinect without its developer packages? How will you write this in a language the Kinect doesn't support? This needs to be longer and more concrete.*

Difficulties – None

*Every project has difficulties be it a new language, new system, etc. If there are truly no difficulties, this project is too easy.*

Outcomes – This is going to make us better programmers and we want to use the Kinect because we think it's neato burrito.

*How is this going to make you better? What sort of skills are you going to gain? What about the Kinect is enticing?*

Member Roles – Harold is going to make the UI, Fred is going to write the motion tracking, Susan is going to write the OS that will run the application, and Bob will help out where he's needed.

*Make this a bulleted list!! This workload is unbalanced, Bob has no defined role.*

# Project Option #1

## Dictionary Hangman

Project Description: A user would input a word or multiple words. The program will compute the most efficient way to guess while using the dictionary. The dictionary will reduce as the possible words are reduced. The computer will guess the most common letter in the remaining words until the word is found. We would program it in Java.

Difficulties: Implementing the use of a library of words to use as the possible words might be a struggle. As well as, creating the interface of the game might be difficult because as a team, we haven't done anything like that before.

Outcomes: We will learn how to find and use new outside libraries and to implement a proper interface in order to create our desired result. We find the idea interesting because it has a lot of room for different ideas and approaches.

## Member Roles:

**Shayla: Working on the main code**

**Tyler: Finding, Learning, & Teaching Necessary Libraries**

**Joon: Working on the main code**

**Cutler: Designing the Interface**

**Ethan: Designing the Interface**

# Project Option #2

## R□/ARDU Game(s)

Project Description: In this idea, we would create a game on a raspberry pi or an arduino that has an analog controller. The controller would be a simple directional controller of some kind. We were thinking of creating a more simple game like Pong or Pac-Man or even creating multiple different games if we finish too quickly. We would use either C#, Javascript or something else to program the game.

Difficulties: Not all of us know what languages we can use for designing games. Implementing the controller in the game to take inputs from the controller and do movements based on the inputs. None of us have created a game on the raspberry pi with a controller.

Outcomes: Those of us who haven't programmed games before will learn new languages while those working on the circuit boards will learn more hardware related skills.

## Member Roles:

**Shayla: Circuit boards**

**Tyler: Working on the main code**

**Joon: Circuit boards**

**Cutler: Working on the main code**

**Ethan: Working on the main code**

# Project Option #3

# Encrypted Website

## Project Description: *Building a website that is encrypted. Only could be solved by a special key or codes. Storing data should always go through hashing or other methods.*

## Difficulties: *None of us have done anything related to encryption so this will be a learning experience on that front which may present some difficulties.*

## Outcomes: *We will learn how the basics of encryption work. This project would teach us to use encryption in many different projects that require data protection.*

## Member Roles:

**Shayla: Designing the website**

**Tyler:  Designing how the website is encrypted**

**Joon: Research and design the website**

**Cutler: Designing how website is encrypted**

**Ethan: Designing the website**