



# Technical Risk Assessment

**Chameleon Hide!:**

**A multiplayer hide-and-seek game.**

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# Development Platform

## Windows

### Risk: Low

Our team will be using windows for the development process of our game. We will be starting on windows at the beginning of the project. Unity is also built for windows platform so it will be very easy to create the game. We would be able to use steam greenlight to try and gain a community of users who like the game and then we could publish it. This will also be one of the more easily accessible platforms for many people.

# Development Environment

## Unity

### Risk: Low

We will be using Unity because it is a very easy game engine to use. Unity will be perfect for this game because it is a very easy to program in. Unity is also perfect for our game because it allows the programmers to use a 3D space and manipulate those objects in that space. This will also allow the designers to be able to created the levels for the game. This allows the developers to debug during runtime. Overall this game engine is preferable because of all the options.

## Visual Studios

### Risk: Low

Visual Studios 2017 will be used during this project. Visual Studios is fully supported by the Unity Engine. Visual Studios is also much more familiar with the programmers and designers in the group. The IDE also provides a huge selection of

development languages. It also allows developers the ability to build applications for free.

## Git

### Risk: Medium

Git is a version control software that will allow our team to be able to post documents, assets, and game files onto a central hub so that it can be accessed by anyone in the group easily. We will be using Git on the repository page of the Redmine website that Champlain College has provided us with. The programmers know how to use Git and are very confident in helping other team members understand how to use it. We will be updating the information in this repository to different folders. The artist will place the art assets in the Artists Playground folder while the programmers and designers work with the actual game build in the Chameleon Game folder.

# Game Mechanics and Systems

## Chameleon movement

### Risk: Low

The players will be able to walk around in the game. They will be using either keyboard and mouse or a game controller. This will allow the players full 360 control over where they would like their players to travel to.

## Chameleon Eating

### Risk: Medium

The player will be able to interact with objects in the game. They will be able to pick up food in order to increase their hunger bar by using their tongue. The chameleons tongue will be able to shoot out from its mouth and capture a food item that it comes into contact with. If it doesnt come into contact with anything, it will come

back with nothing. If the chameleon eats enough bugs and fills up their hunger meter, they win the game.

## Chameleon Camouflage

Risk: Medium

Players will be able to use their camouflage in order to hide. This will make it harder for the bird player to see them. The player will always be the last color that they blended to until they are able to change again. The player will only be able to change their colors if they are completely still and until they reach a certain amount of time. There will also be a cooldown so that the player isn't able to change colors instantly.

## Multiplayer

Risk: High

Players will go up against each other either through split-screen player or networking. The team will start with split-screen gameplay and will hopefully change to networking in the future. This will allow players to keep their locations private and improve the immersion that they experience.

## Bird Movement

Risk: Medium

The player will be able to move around 360 degrees as well as up and down. This in turn allows them more movement than the chameleon. The player will also need to flap their wings in order to continue moving in the air. On top of this, the player will be able to dive bomb the chameleon. The last thing that the bird would be able to do is glide. This would allow them steady movement and they would be able to see more around them.

## Bird Eyesight

Risk: High

This would allow the player to be able to enhance their eyesight and see through the environment. When the player uses this ability, they will be able to zoom in and out of where they are looking. This ability will also allow the player to see a general location of where the chameleon could be hiding but will not reveal its hiding spot.

## Bird Catching

Risk: Medium

The player will be able to catch the chameleon only if they dive bomb in the exact spot that the chameleon is in. If the player fails to do this, they will experience a clawing animation but the bird will not win the game. If the bird successfully catching the chameleon, they will win the game.