# Overview

Penguin Quest is a 3D platformer staring a penguin who is tasked to stop the Frost; a mysterious chill that freezes everything it touches.

### Objective

The player controls a penguin that must get through jumping puzzles in multiple levels. Each level ends with the penguin acquiring a fragment of the Magi. Obtaining all three fragments will produce a spell that will destroy the Frost.

### Controls

Player will control the character with the WASD keys for movement. There is a certain degree of camera control using the mouse. The player can jump with the spacebar and in certain cases, able to air-jump.

### Player

This game will be a singleplayer one. No plans to implement coop with another player. For now.

### New Architecture

In order to develop this new game, we need to implement a host of new features:

* New levels with different structures
* A camera control associated with the mouse
* Textures and assets for player and environment

### Development Plan

Stage 1 – Setup

* Base application setup
* Setup basic title screen with options to start and exit game
* Base game will have the penguin animated and a plane to walk on

Stage 2 – Main Development:

* Add jump command
* Create stage 1 map
* Get robot and AI working
* Interaction with player and AI
* Improve GUI – add logo, score, lifebar

Stage 3 – Finishing Touches:

* Add sound
* Create more stages
* GUI touch up
* Make it pretty!

### Changes and Cuts

We originally planned to have enemy AI that will chase after the player but after creating the stages, we decided that they're too small to include AI. They tend to fall off the platforms. The life bar became a timer for the invisible maze stage.

Another feature that didn't make it in are comic style cut-scenes. It was originally story heavy but due to time constraints and other finals to study for, we were unable to create the necessary assets in time. So we scale down the plot to a very basic save the world story.

### Members

Current members for our team:

* Atticus Crowe
* Jeff Dolan
* Kevin Teng

### Division of Labor

* Controls and camera – Jeff
* Story – Atticus, Kevin
* Sound – Atticus, Jeff
* Physics Engine – Atticus, Jeff
* Textures and Assets – Kevin
* Particle Effects - Jeff
* Levels – Kevin, Jeff
* Trailer – Atticus, Kevin