Farm Defense
Software Architecture Document (SAD)

Contents:

1. Introduction

1.1 Purpose

This document serves as an outline for the architectural design of the software. It is intended to convey the structure and flow of the program and explain the placement of different features of the software

1.2 Scope

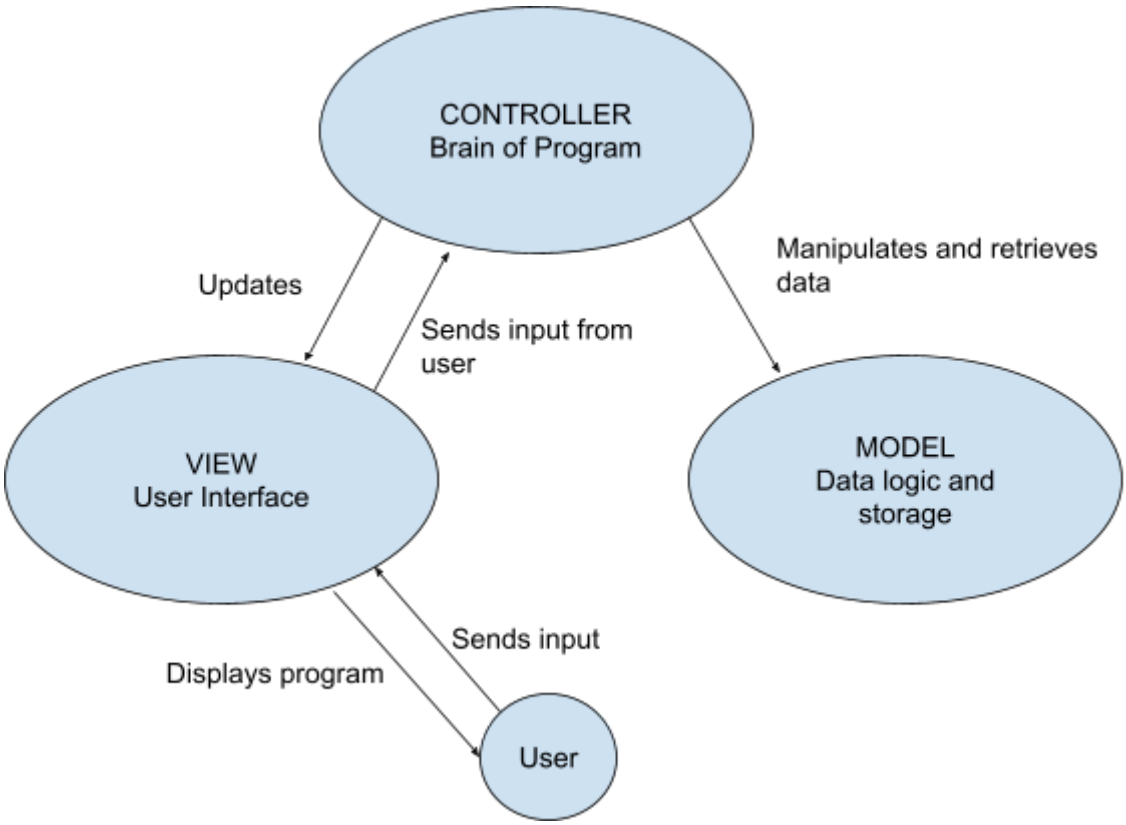
This document provides an overview of the architecture of Farm Defense. Farm Defense game being developed by Carl Gombert and Zander McGinley.

2. System Overview

2.1 High Level System Description

This software can be broken down into three distinct components. The controller serves as the brain of the program, while the model serves as the program's data logic and storage and the view serves as the user interface.

2.2 Components and their interactions



System Architecture

2.2.1 Interaction between controller and model

The controller creates all objects contained by the model. The controller then handles updating their data as the program runs and updating how they are rendered on screen based on their data. There are a few instances where the model manipulates data in the controller, notably in order to change the games “game state” (paused, running, main menu)

2.2.2 Interaction between view and controller

The view is in charge of displaying all of the graphics and after the controller has gathered all the data on how a frame should be rendered, the controller sends this to the view to display. The view represents the current state of the model as decided by the controller. The view takes in user input in the form of the user clicking in different places

on the view, however this information is processed by the controller. The controller also creates all aspects of the view at the start of the program. Any data the view needs from the model is retrieved through the controller.