

# System Design Document

## Group 16 - Avoidance

**Date:** 2012-10-22

**Authors:** Filip Brynfors, Markus Ekström, Florian Minges, Jakob Svensson

## 1 Introduction

### 1.1 Design goals

The design should be loosely coupled and testable.

The game should be playable without lag issues.

## 2 System design

### 2.1 Overview

The application has only one activity, but multiple states. Each state have their own scene for rendering.

The application uses an entity component model by using the artemis framework.

### 2.2 Software decomposition

The application consists of:

- An android Activity
- Application States
- Systems
- Collision handlers
- Components

#### 2.2.2 Component description

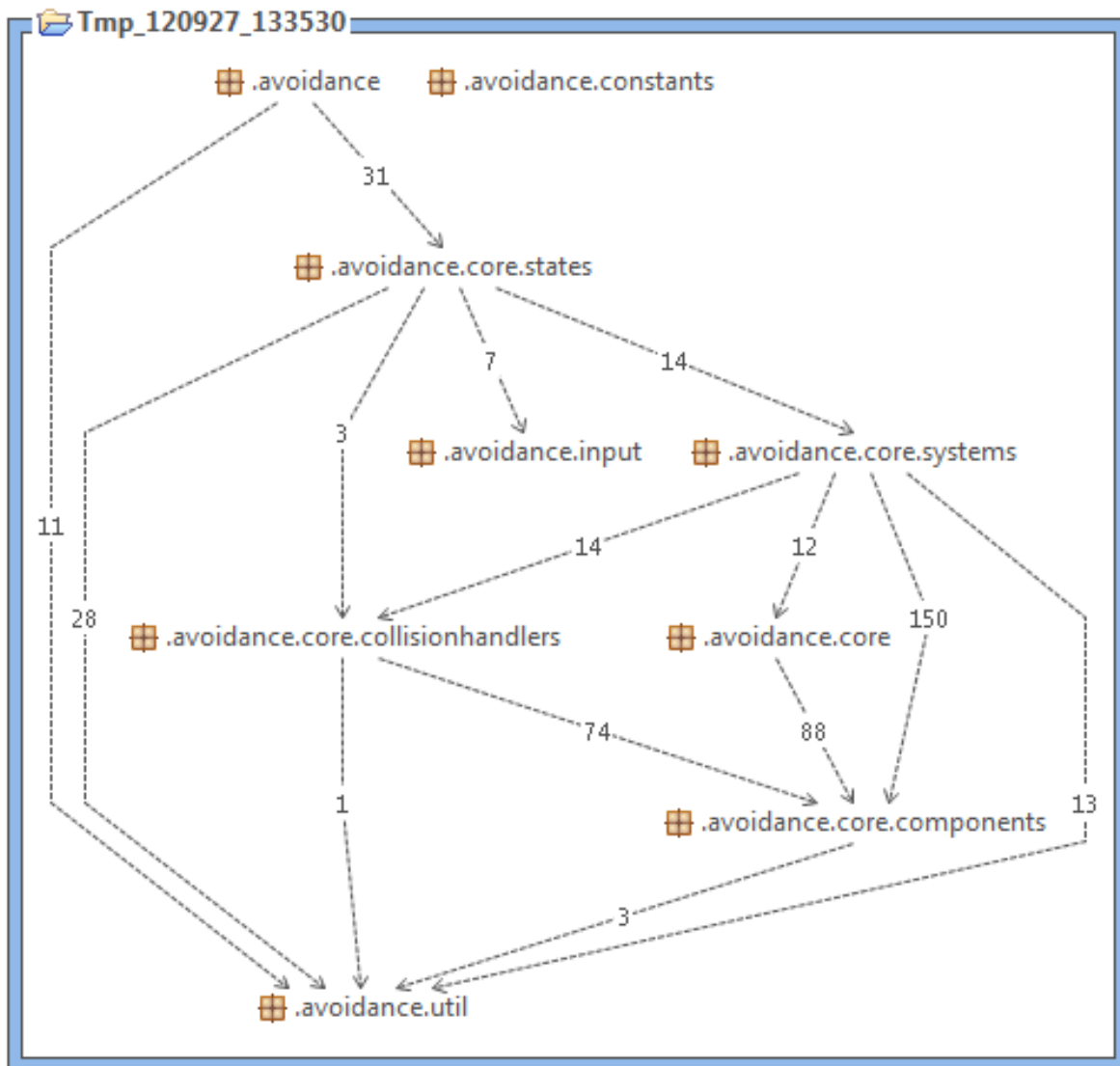
Application States wrap all the data into their respective states.

Systems handles all game logic and modifies the values of the components. The systems have no connection to each other.

Components are only for storing the current state of the entities that contain them. The components contain no logic and should not depend on anything else.

Collision handlers handles collision between entities.

#### 2.2.3 Dependency Analysis



## 2.3 Concurrency issues

N/A

## 3. Release procedure

For every new release, we:

- Create a new *Release Notice* document containing a list of the new features and bugfixes since the last version.
- Create a new *Known Bugs and Limitations* document containing the known bugs and limitations of the game

- Create a new apk
- Create a release tag with the version number in git