



Missile Command

Context

Missile Command is a 1980 arcade game where the player has six cities that are being attacked by an endless hail of ballistic missiles, some of which split like independently targetable reentry vehicles. The player has anti-missile batteries used to defend their cities from being destroyed.

https://en.wikipedia.org/wiki/Missile_Command

<https://my.ign.com/atari/missile-command>



Instructions

Implement an Android app that recreates a simple version of this classic game, according to the following specifications:

- The app will run in landscape mode.
- A rectangle at the bottom will represent the valley under attack (if you want, you can use an image instead).
- An equilateral triangle positioned in the center of the valley will represent the anti-missile battery to defend the cities (if you want, you can use an image instead).
- Four squares positioned over the bottom rectangle will represent the cities, two located left-side of battery, and two located right-side of the battery (if you want, you can use an image instead).
- At random lapse of time, missiles will appear at any position from the top and begin to fall at random speed directed to any of the cities.
- Each missile will leave its visible trajectory while falling.



- When the player touches the screen, the reference point will show an expanding circle (with a specific max size) representing the exploding bomb launched by the anti-missile battery. An explosion sound will be played.
- If any missile reaches a city, the city will be destroyed.
- Game ends when the player loses all cities.
- The score of the game will be the number of missiles destroyed.

Recommendations

- Implement the bomb explosion as a class that handles all animation effects.
- Implement the missile as a class that handles the animation of the trailing trajectory of the missile while falling.
- Use elements from reference projects.
- The specifics of the project are free (size of cities, max radius explosion, etc.), but it is very important that you respect the original concept of the game.

Submission

- Android Studio project.

[EOA]