REVENGETABLES

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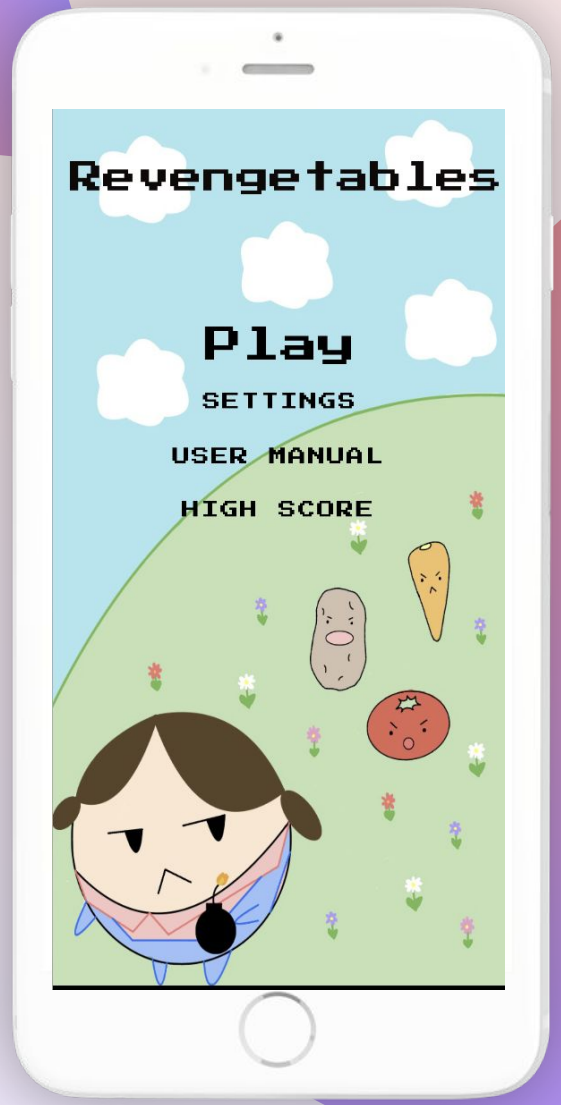
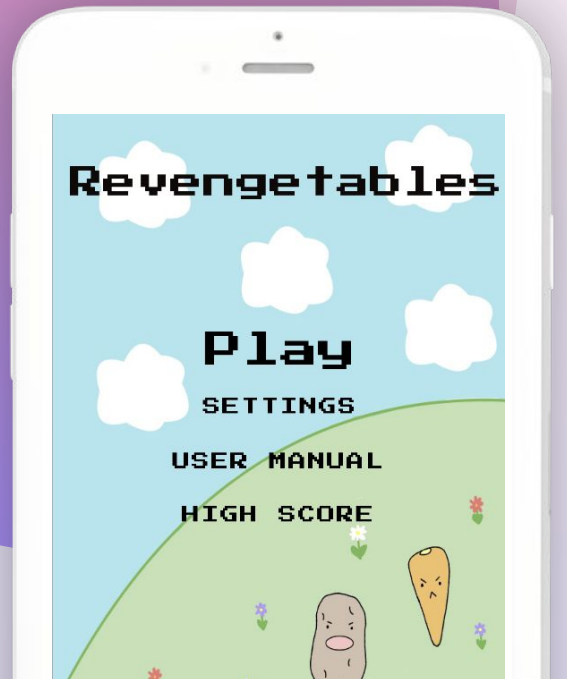
COMING SOON

Google Play





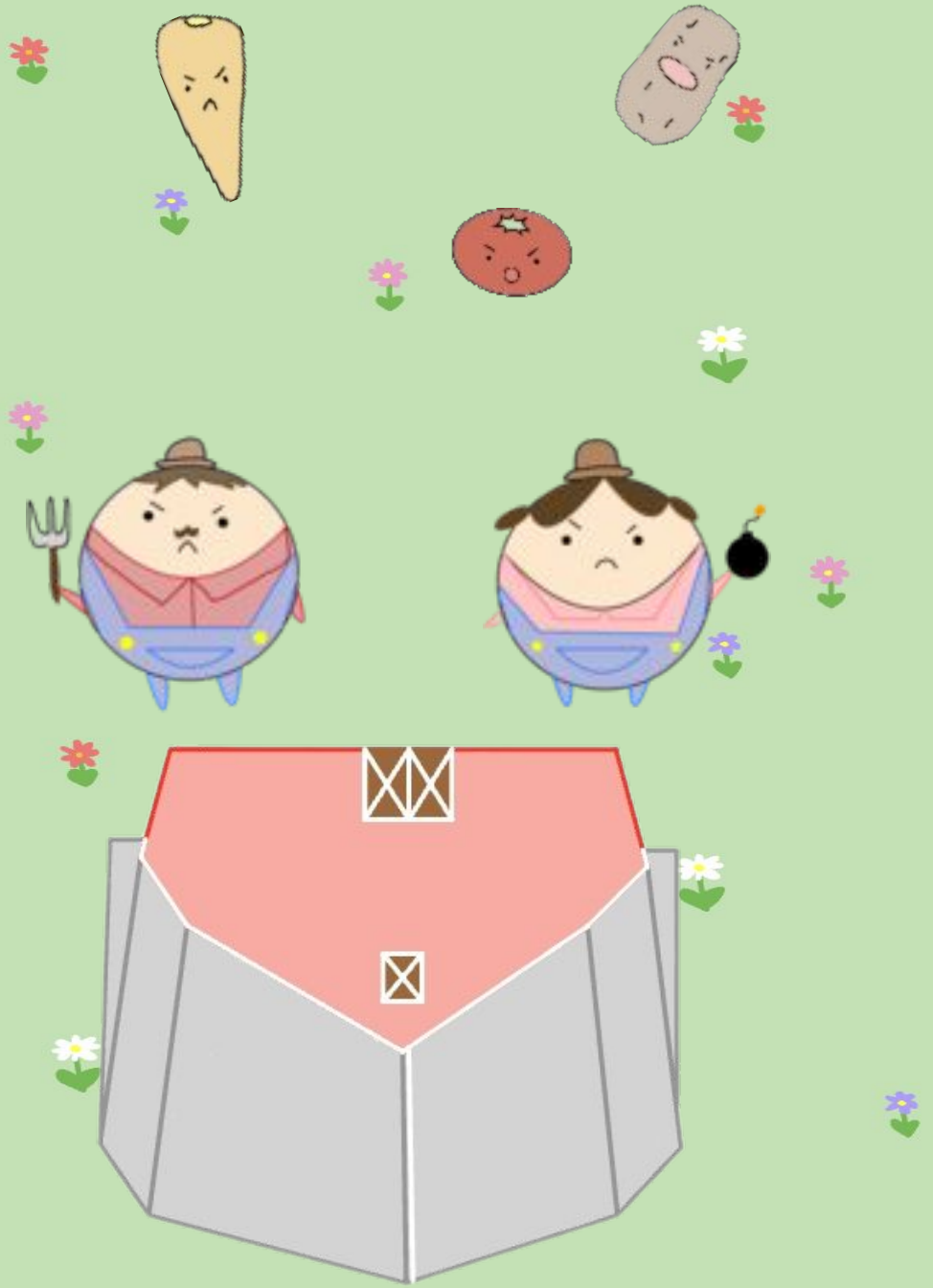
01

THE INVASION...

Infectious vegetables have infiltrated the farm and it is your responsibility to protect it!

You will have a variety of farmers to choose from that have their own special abilities :

- **DEBBIE** is a farmer by day, and demolitions expert by night! In an instant, she can blow away hoards of vegetables via a dazzling explosion! Kaboom!
- **GERALDO** was once a professional fencer, but he enjoys his retirement tending to his farm. A pitchfork pro, he dashes through battalions of vegetables with style! En Garde!



02

Requirements & Features

Requirements

Moving graphical pieces.

- Farmer, Infected Vegetables

The ability of the user to control some of the moving pieces through input.

- Farmer responds to an input from the user ⇒ touching and dragging

Include a score that is changed based on the user satisfying requirements.

- Score is incremented based on
  a. Time elapsed
  b. Number and type of monsters killed

Features

High-score list that persists when the app is closed and then reopened.

Allow the user to tweak the rules of the game being played.

- Types of Farmer Movements
  a. the **DASHING** farmer
  b. the **EXPlOSIVE** farmer
- Difficulty
  a. Easy, Medium, Hard
- Music on/off

Integrated sound effects for

- Home Screen
- Lose Screen
- Button Clicks

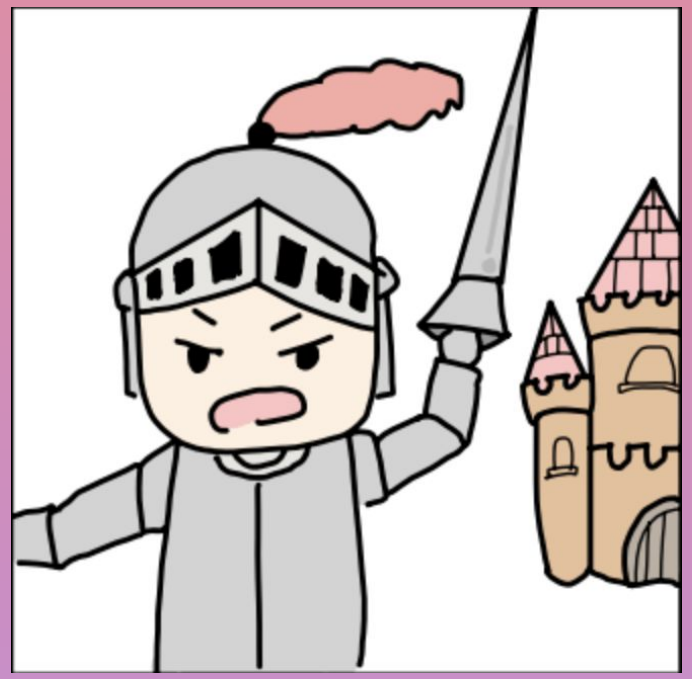
C++ Backend

Design Development

We started with the concept of 'Knight's Labyrinth', where a brave knight defended a castle from attacking monsters.

However, we wanted to create a game that could appeal to a wider audience and decided to pivot towards a more universally loved game.

Thus, we developed a new concept that would provide an engaging and exciting experience for players of all ages and interests.

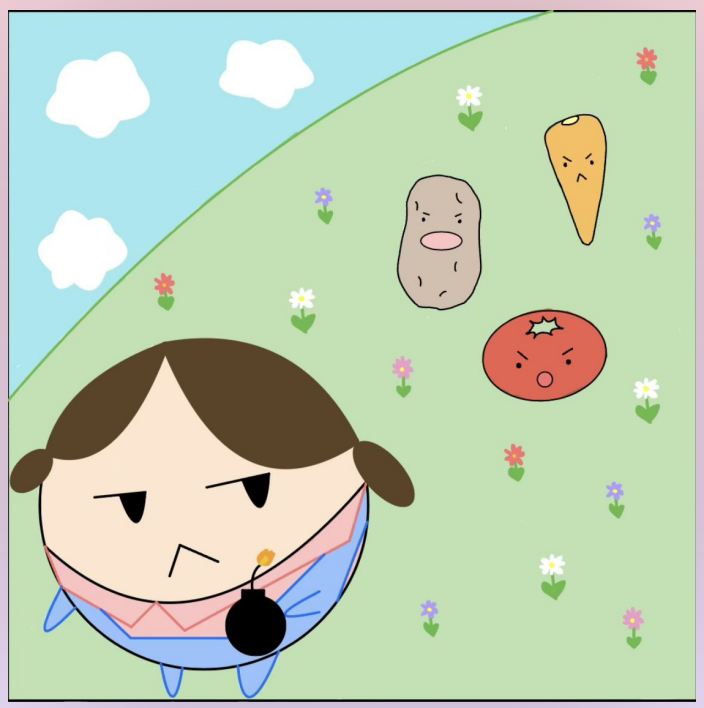


Original concept art for Knight’s Labyrinth

03

Project Demos

Logo



LIVE DEMONSTRATIONS + GAMEPLAY

04

Obstacles and Future Implementations

As we navigated through this project, we came across numerous issues:

- We had to adjust to the large scale of the project
  - Created a system to keep git repo organized
  -
- Learning the tools and levels of abstraction in Android Studio
  - Binding/fragments
  - Setting up SDK, NDK, and emulator
  - Gradle

Although we were able to accomplish all of the deliverables, we fell short in a few categories:

- Sound effects were added, however, we did not incorporate any sound effects for the special ability of each farmer
- The C++ backend did nearly all calculations
  - we had a few functions in Backend that were more compatible with Java than C++
- The ScoreBoard could have used player names.

Remaining Deliverables:

- Unit Testing
- Proper Documentation
- Additional Features/Polishing of existing features to improve user experience

Improvements:

- Use activities rather than fragments.
- Create separate classes instead of switch statements for each monster rather than combining them into one case system.
  - More efficient - frontloads processing
  - Less chance of error
- Use Gitlab for issues and documentation

Thank You

Any Questions?