

# Herdsman

## Description

Please create a simple 2D prototype of the mini-game where the player can collect animals using Main Hero and move them to the destination point (yard).

### AC:

1. Player run the application and can see the game field (green area) with Main Hero (red circle).
2. Player can see the random number of animals (white circles) located on the game field at random positions.
3. Player can see the destination point: yard (yellow area).
4. Player can see the score value at the Top UI.
5. Player can click on the game field and the Main Hero must move to the click position.
6. If the Main Hero moves close to animal it will follow the Main Hero – create a group. The max number of the animals in the group is 5.
7. If the animal reaches the yard the score counter increased.

### Additional (optional) AC:

1. Create a spawn generator which will spawn animals in random time intervals at random positions.
2. Create a patrol behaviour for the animals. During the patrol animals **cannot** move to the yard without Main Hero.

### Tools

1. Programming language: TypeScript
2. Engines or renderings libraries: PixiJs is preferable, but not mandatory – can be used anything.

### Assets

You can use a placeholder graphics or any shared assets.

### What we want to see:

1. The code of the prototype is the main point of interest. Please:
  - a. Describe your OOP and SOLID knowledge
  - b. Describe your Patterns and Best Practices knowledge
  - c. Describe your Code Style and Architectural knowledge
2. Game Framework building skills
3. All points from the AC **must** be completed.
4. Points from the Additional (optional) AC can be skipped. But if they will be completed it will be a plus.

### Delivery:

Please use Git Hub.

**Good luck!**