

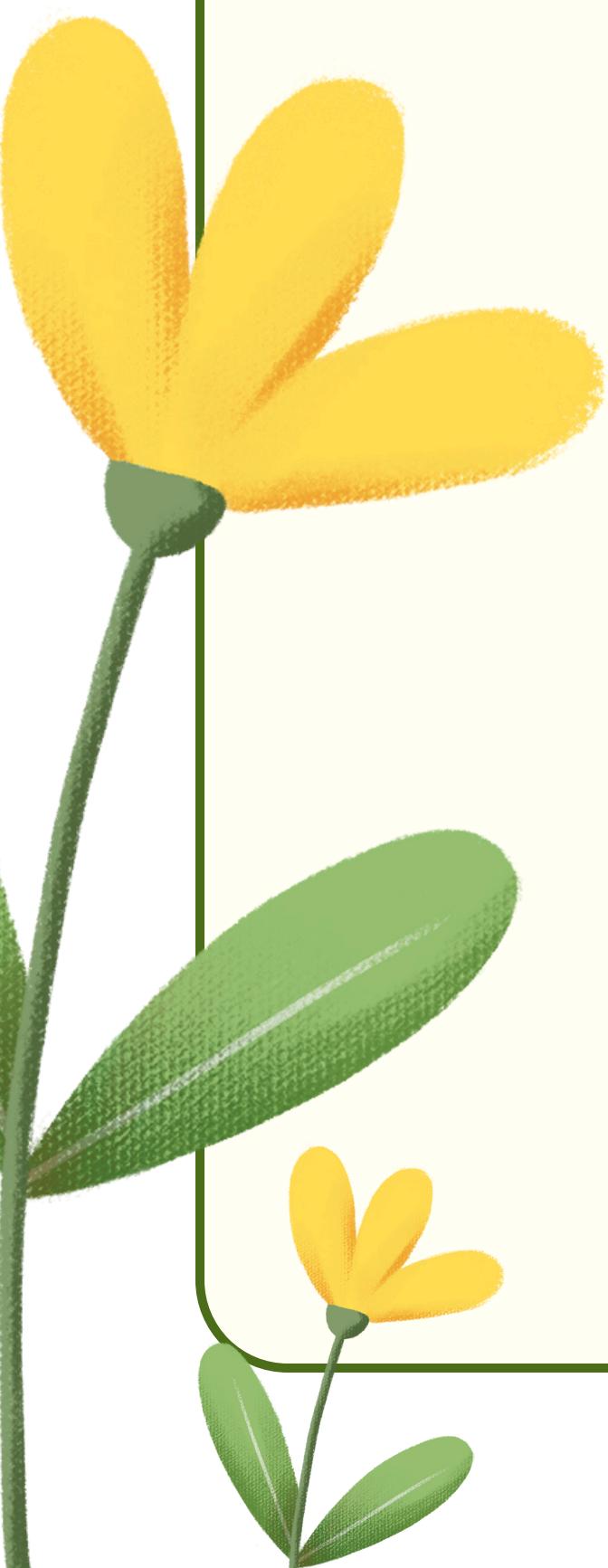
GARDEN OF FLOWERS



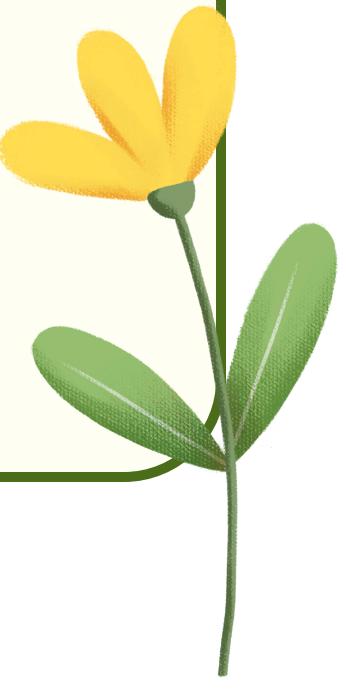
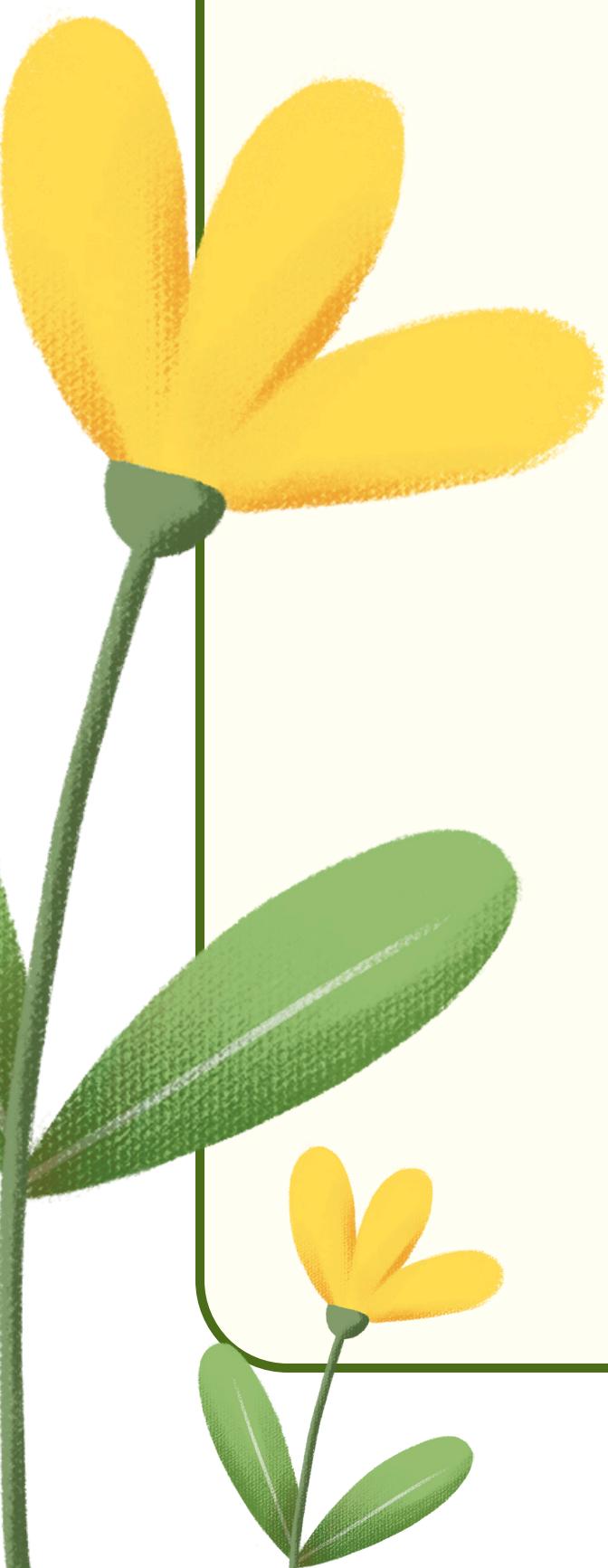
INSPIRATION



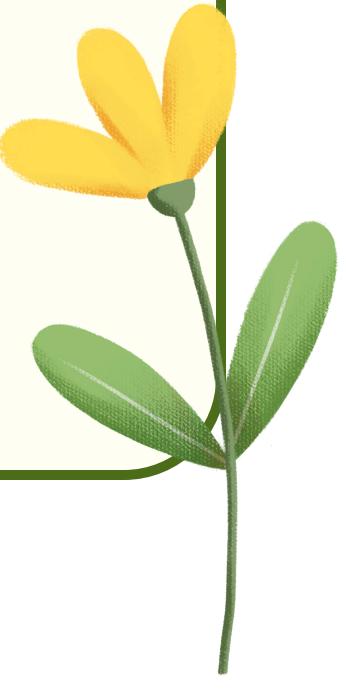
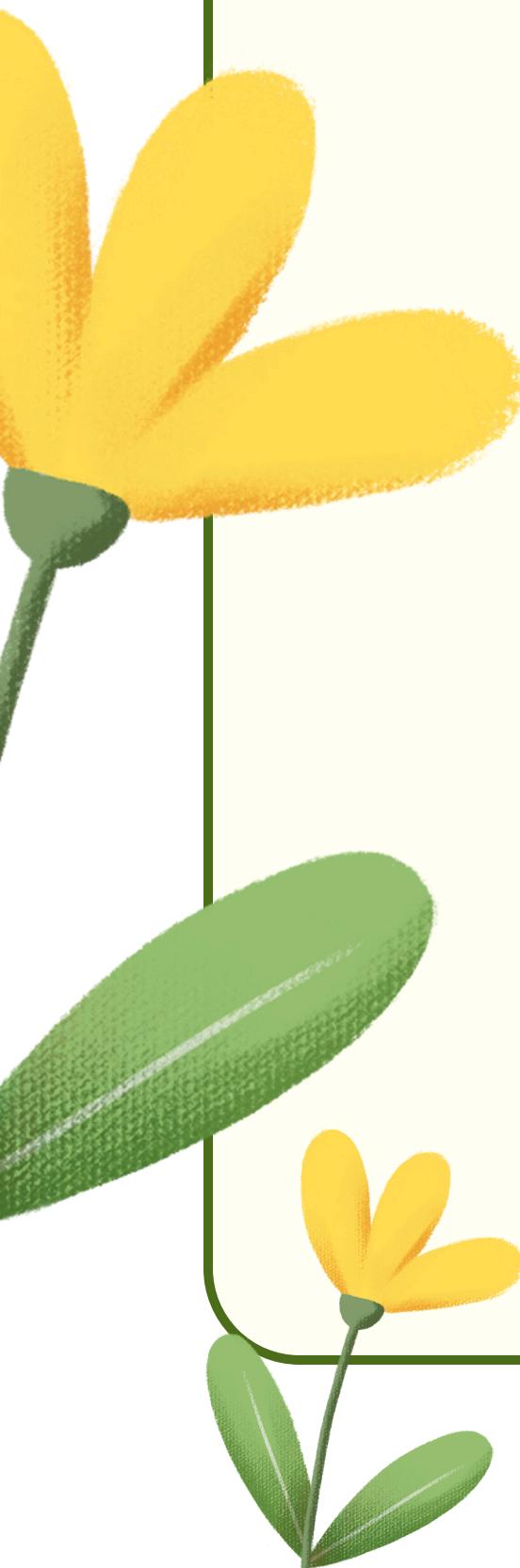
INSPIRATION



INSPIRATION



GAME OVERVIEW

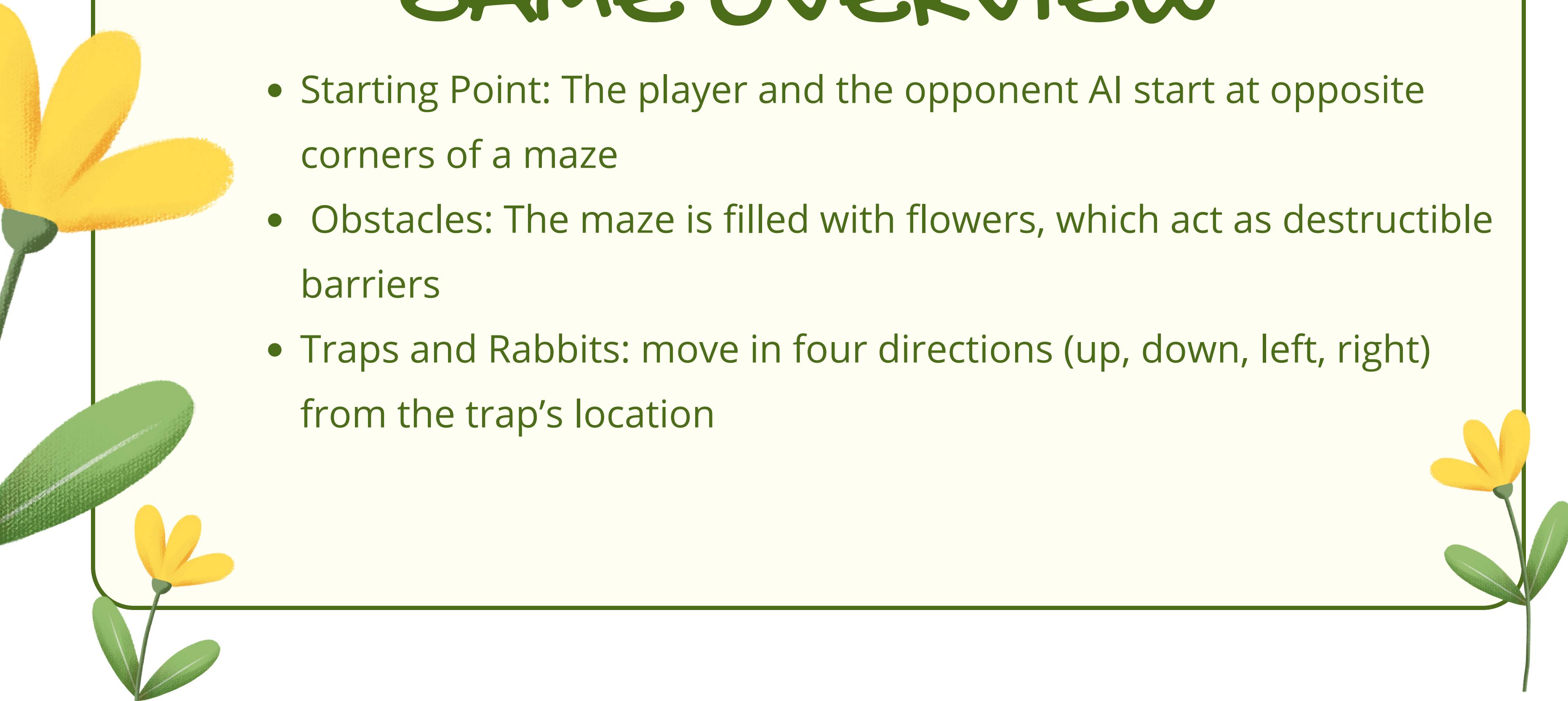


GAME OVERVIEW

- Starting Point: The player and the opponent AI start at opposite corners of a maze

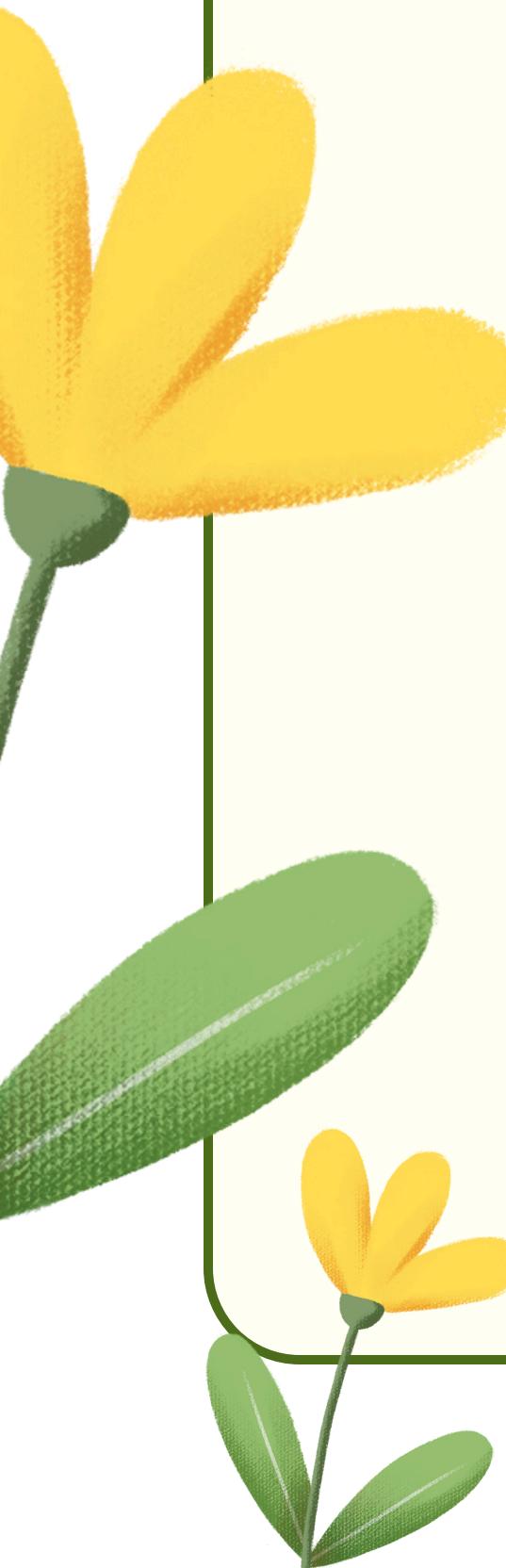
GAME OVERVIEW

- Starting Point: The player and the opponent AI start at opposite corners of a maze
- Obstacles: The maze is filled with flowers, which act as destructible barriers



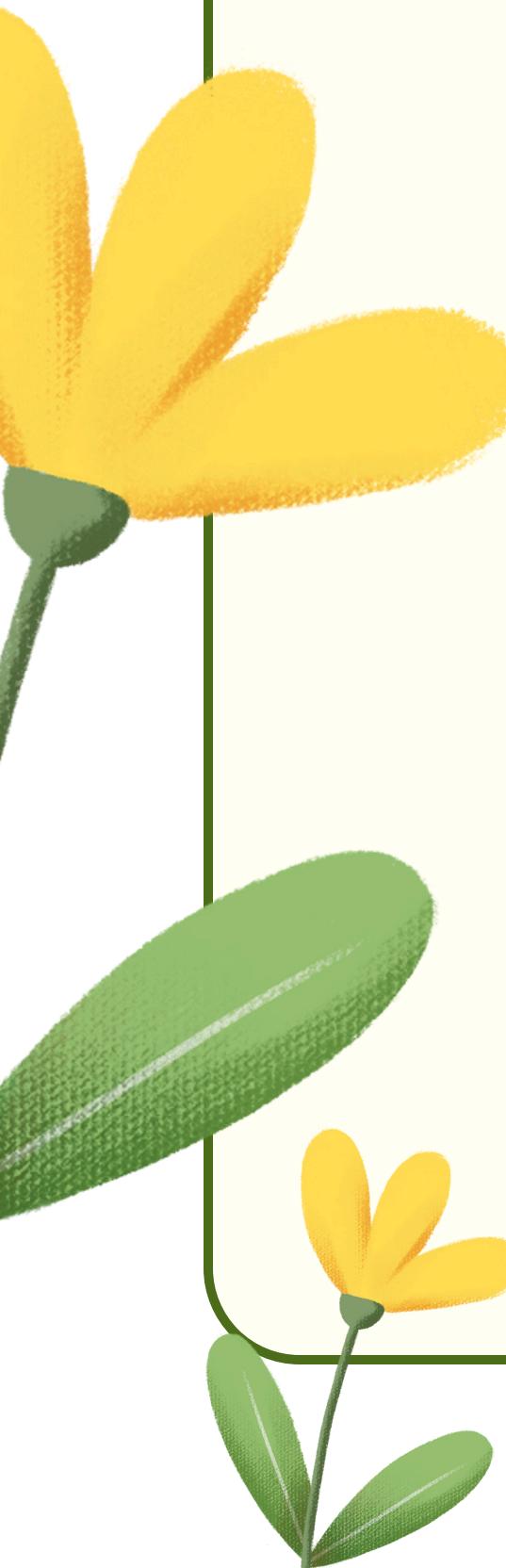
GAME OVERVIEW

- Starting Point: The player and the opponent AI start at opposite corners of a maze
- Obstacles: The maze is filled with flowers, which act as destructible barriers
- Traps and Rabbits: move in four directions (up, down, left, right) from the trap's location



GAME OVERVIEW

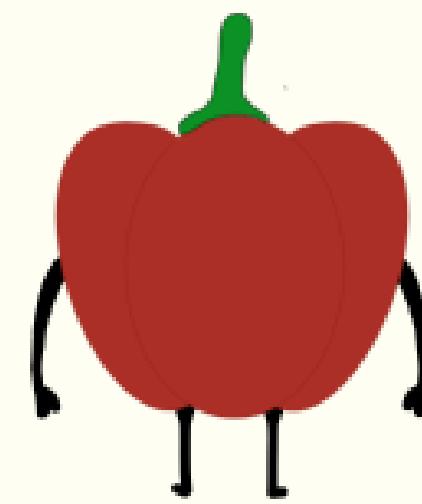
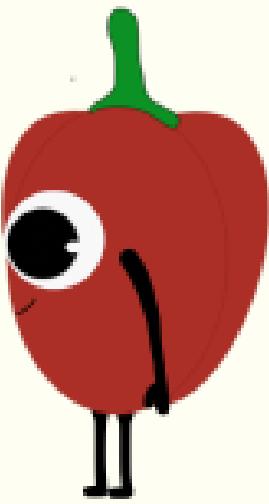
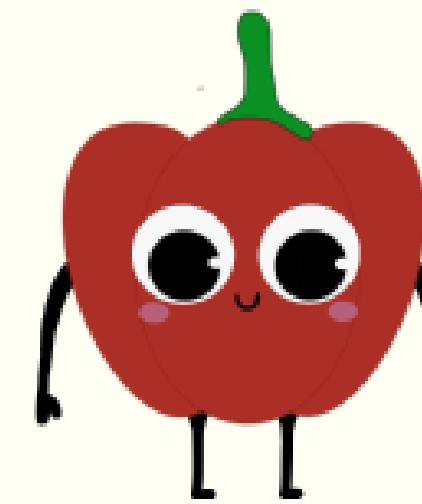
- Starting Point: The player and the AI opponent start at opposite corners of a maze
 - Obstacles: The maze is filled with flowers, which act as destructible barriers
 - Traps and Rabbits: move in four directions (up, down, left, right) from the trap's location
 - Power-ups: Destroyed flowers may drop power-ups (speedup , extended range)
- 



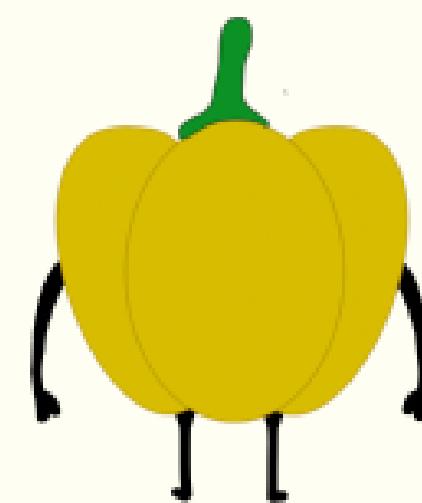
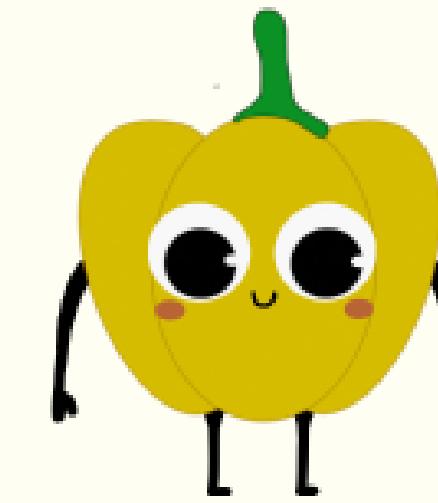
ASSETS

- Characters
 - Player and opponent
 - Tiles
 - Collections of textures used to build the environment
 - Traps
 - Consists of rabbits running in four directions
 - Power-ups
 - Appears randomly when flowers are destroyed.
- 

CHARACTERS



Red bell pepper = Player

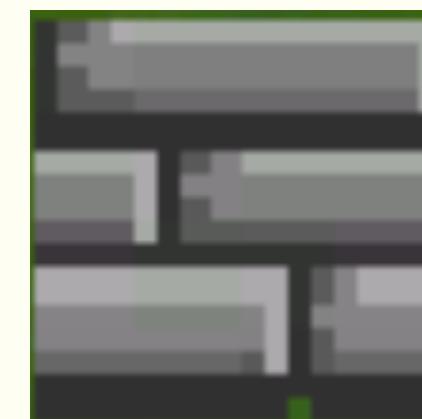


Yellow bell pepper = Opponent

TILES



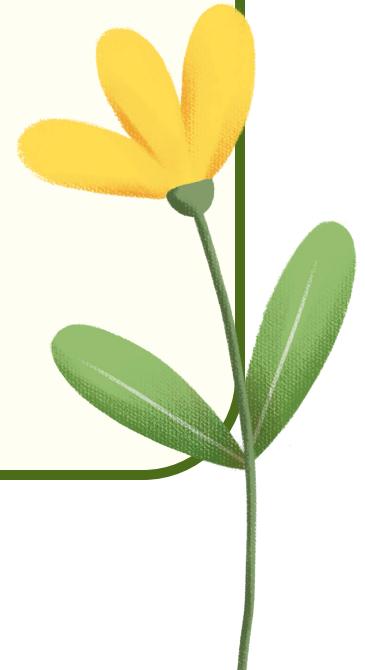
Grass



Bricks



Flowers - destructible



TRAPS

- Players can place traps around the game field.
- The traps consist of baskets filled with rabbits.
- Shortly after the trap is placed, the rabbits run in four different directions

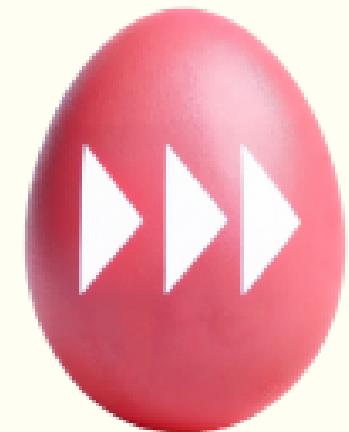


POWER-UPS

Power-ups appear in the form of Easter eggs after certain flowers are destroyed.

Contains different properties depending on their appearance.

Speed



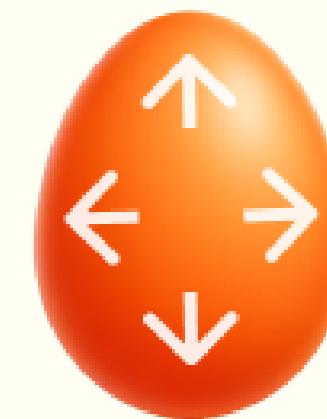
Increases the player's movement speed.

Extended Rabbit Range



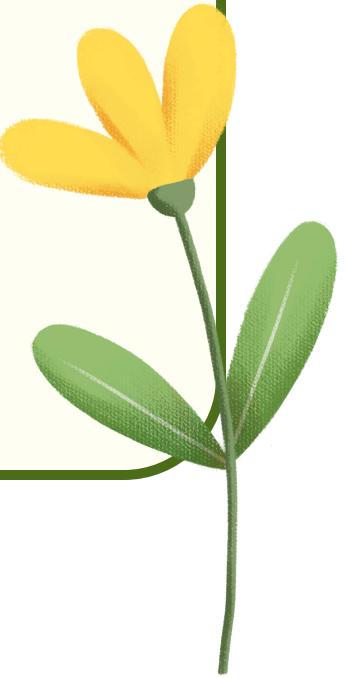
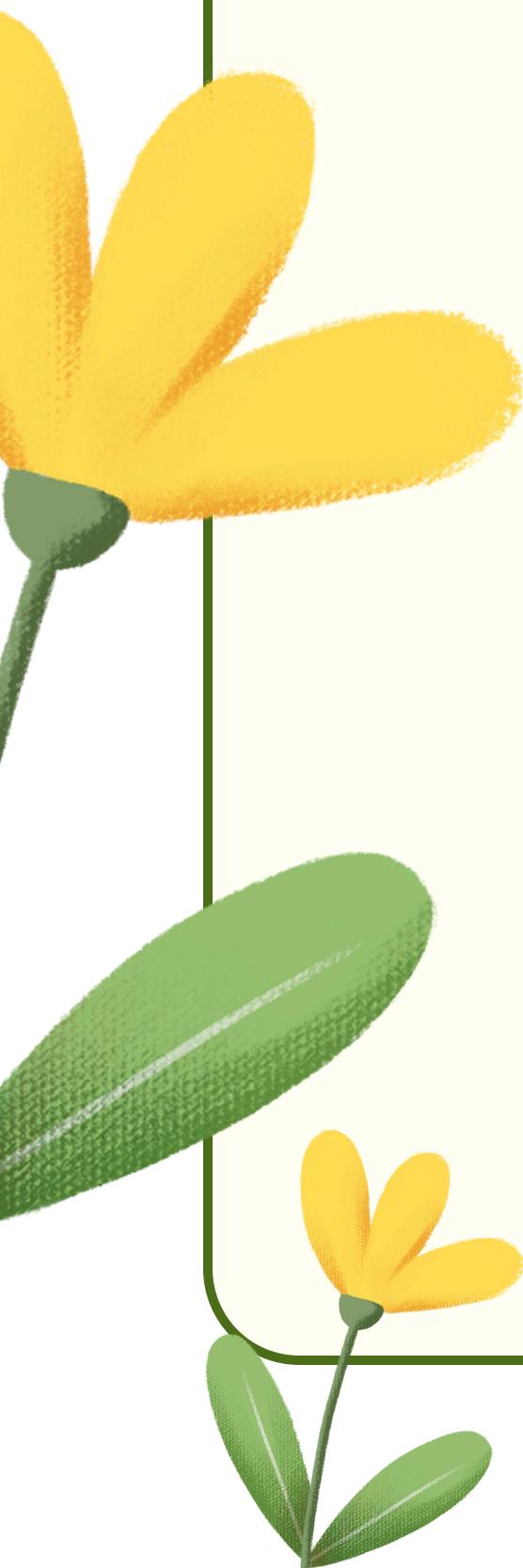
Increases the distance rabbits can travel.

Additional Traps



Allows the player to set more traps simultaneously.

GAME



AI APPROACH



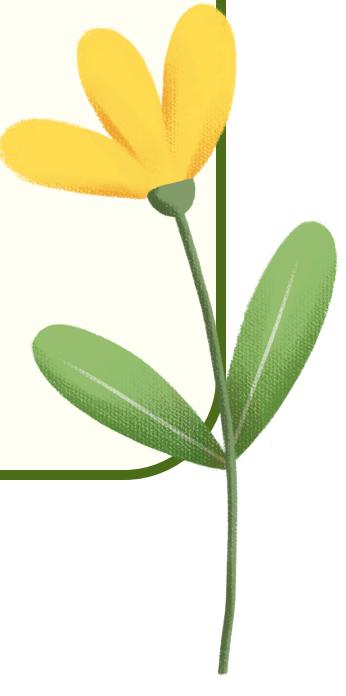
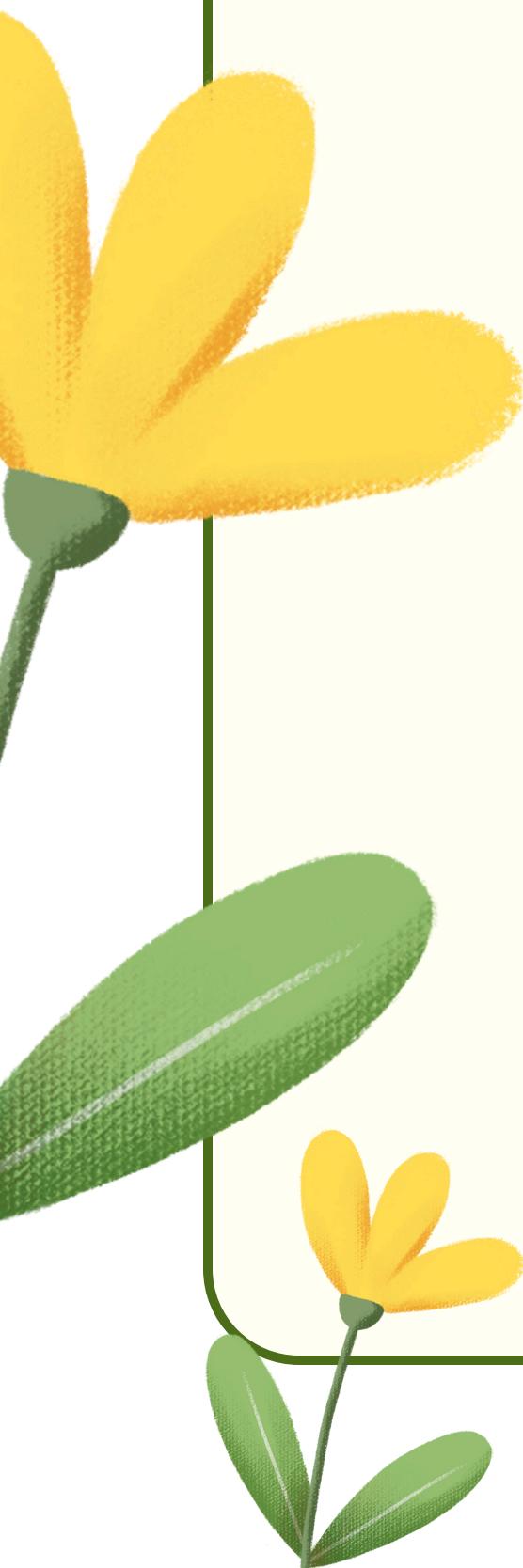
AI APPROACH

Finite-State Machine
(FSM)

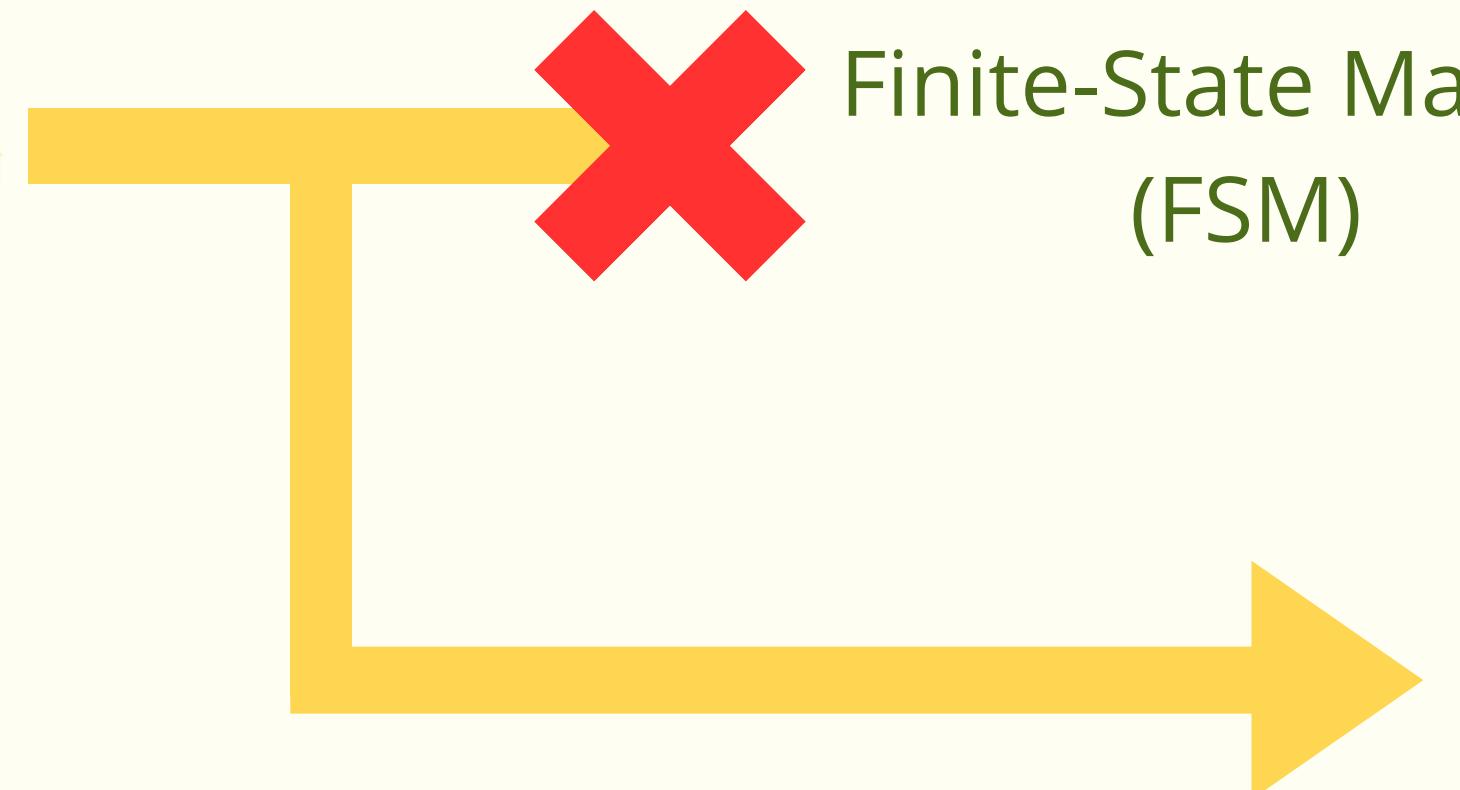
AI APPROACH



Finite-State Machine
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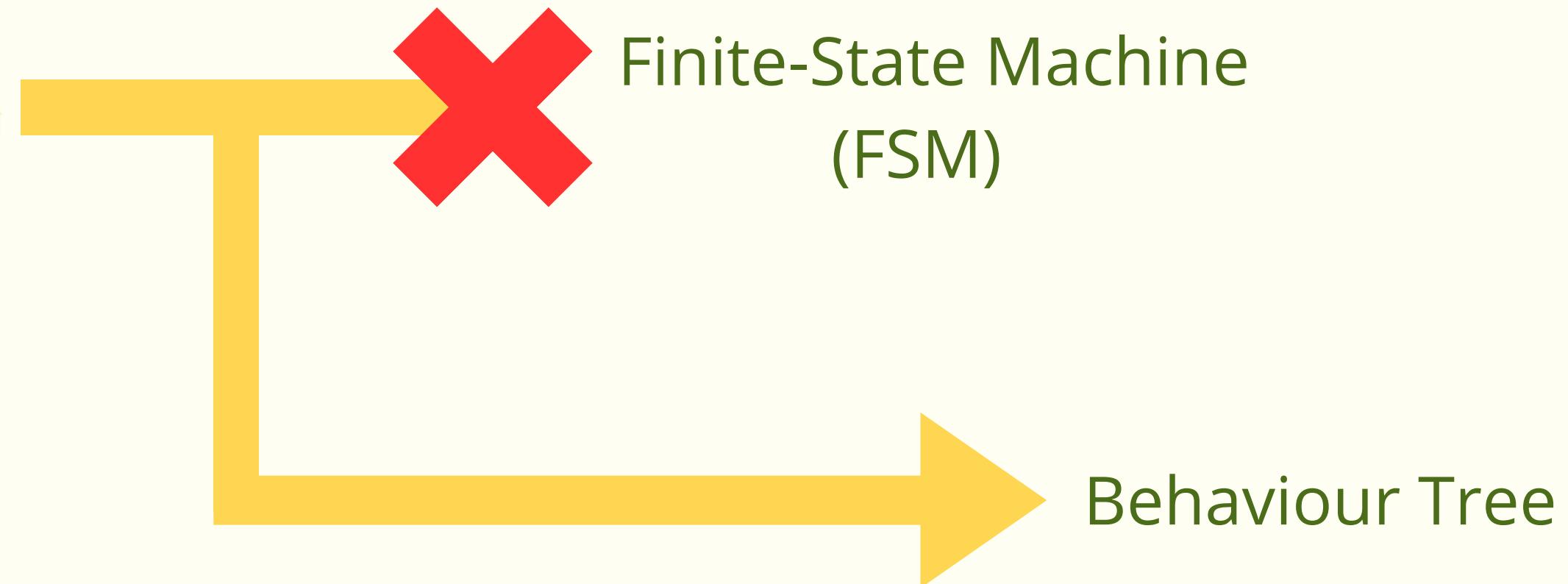


AI APPROACH



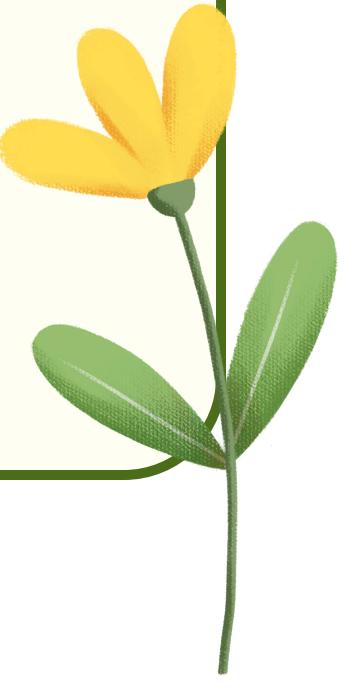
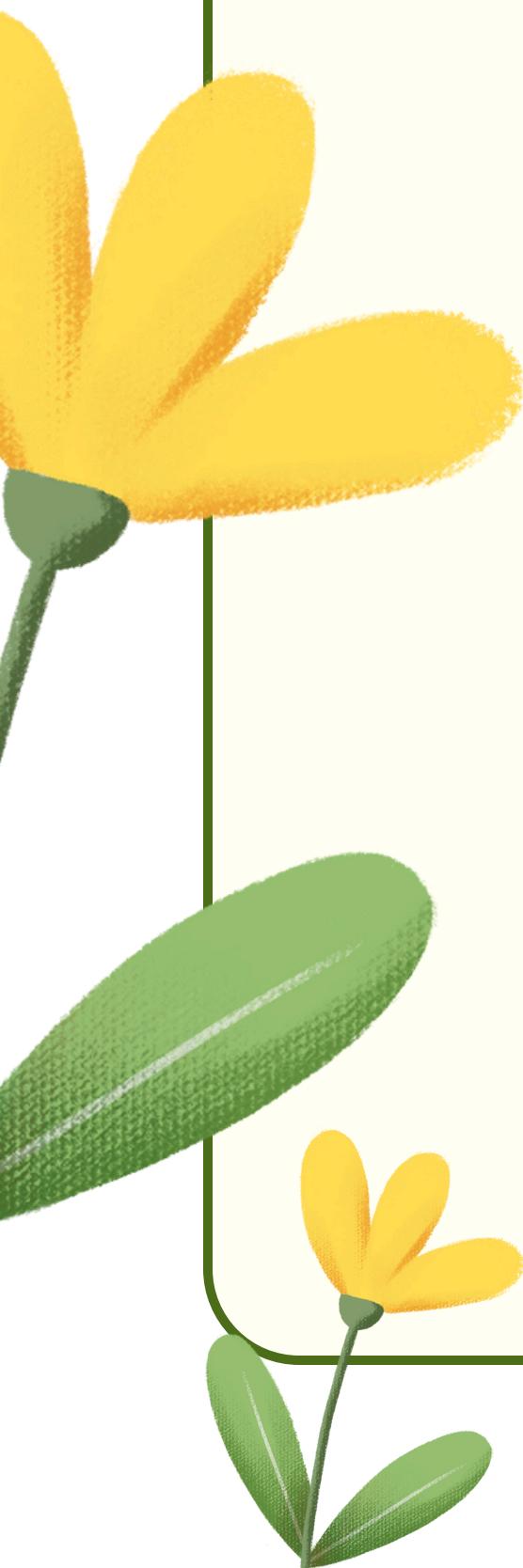
Finite-State Machine
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AI APPROACH



AI APPROACH

Behavior Trees with Behavior Bricks



AI APPROACH

Behavior Trees with Behavior Bricks

key nodes :

- Survive

AI APPROACH

Behavior Trees with Behavior Bricks

key nodes :

- Survive
- Collect Item

AI APPROACH

Behavior Trees with Behavior Bricks

key nodes :

- Survive
- Collect Item
- Attack

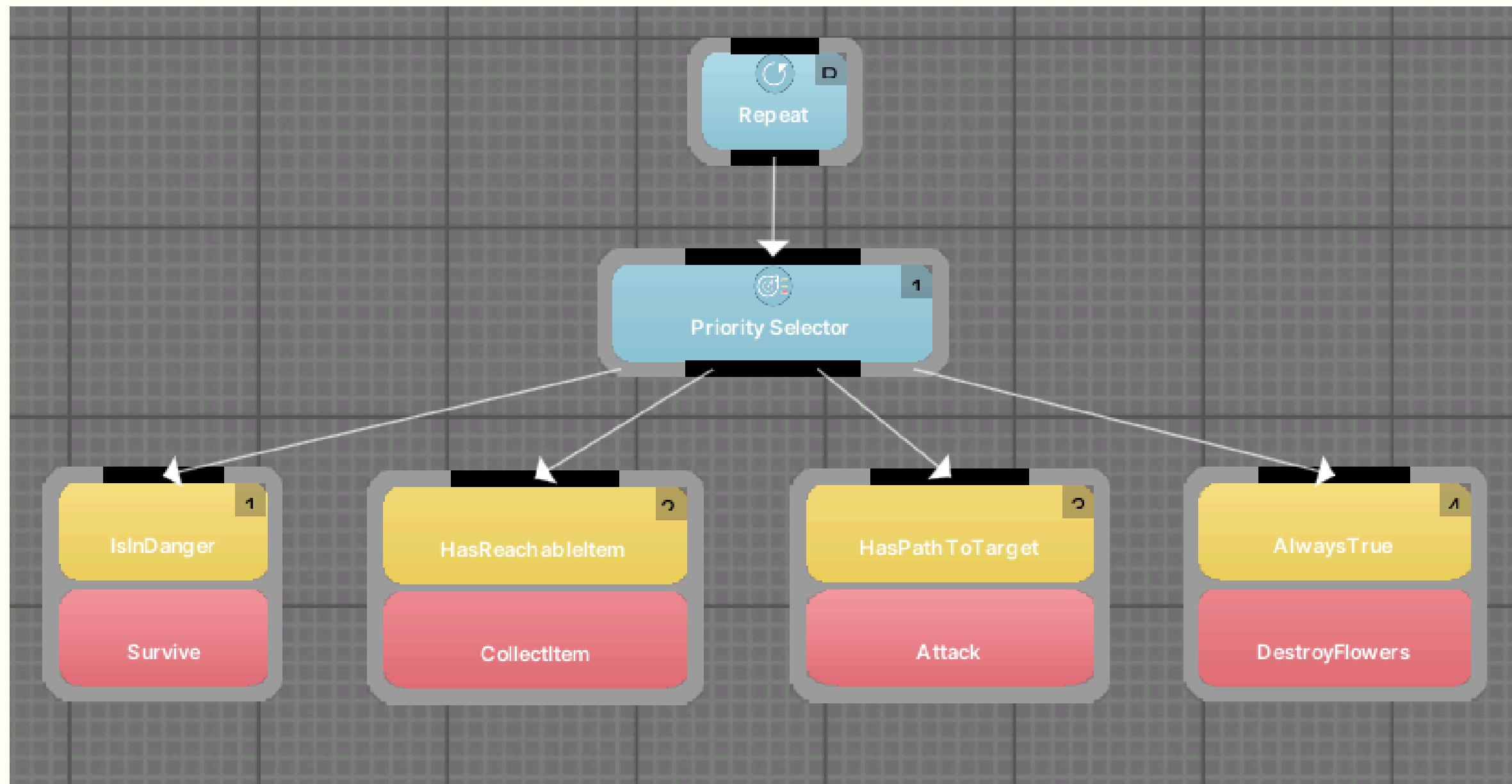
AI APPROACH

Behavior Trees with Behavior Bricks

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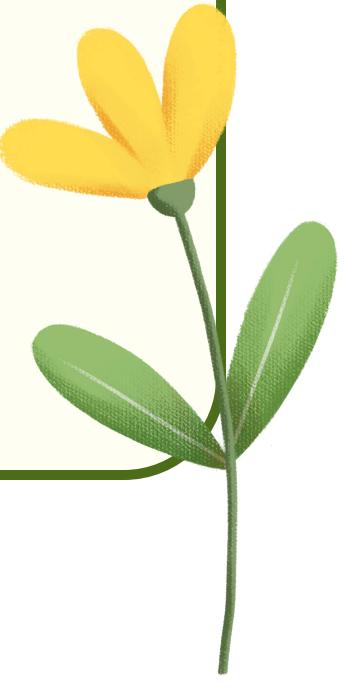
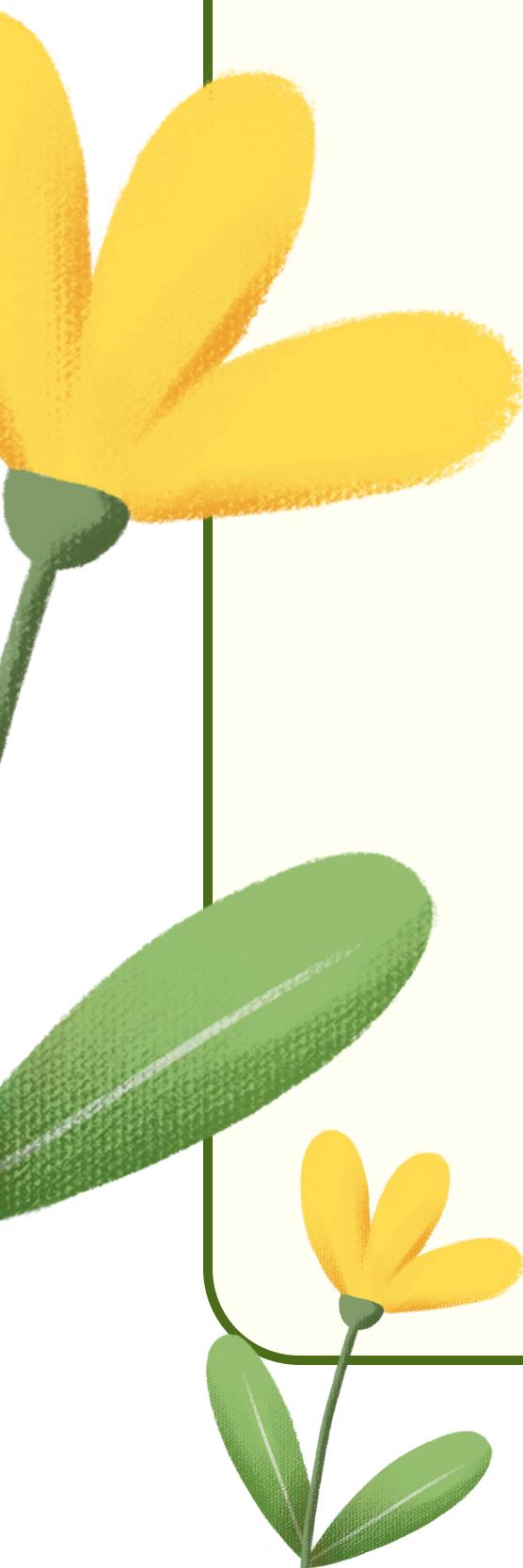
- Survive
- Collect Item
- Attack
- Destroy Flowers

AI APPROACH



AI APPROACH

Pathfinding with NavMeshPlus



AI APPROACH

Pathfinding with NavMeshPlus

- NavMeshPlus enhances Unity's NavMesh for 2D environments.

AI APPROACH

Pathfinding with NavMeshPlus

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AI APPROACH

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- Avoids obstacles like flowers and dirt tiles.

AI APPROACH

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- Dynamically adapts to game changes (e.g., destroyed flowers, traps).

AI APPROACH

Pathfinding with NavMeshPlus

- NavMeshPlus enhances Unity's NavMesh for 2D environments.
- Enables AI navigation through maze-like layouts.
- Avoids obstacles like flowers and dirt tiles.
- Dynamically adapts to game changes (e.g., destroyed flowers, traps).
- Ensures strategic and efficient AI movement.

FUTURE WORKS

- Multiplayer Feature
- 3D Game Development
- Future Power-Ups
- AI Enhancements

DEMO

