


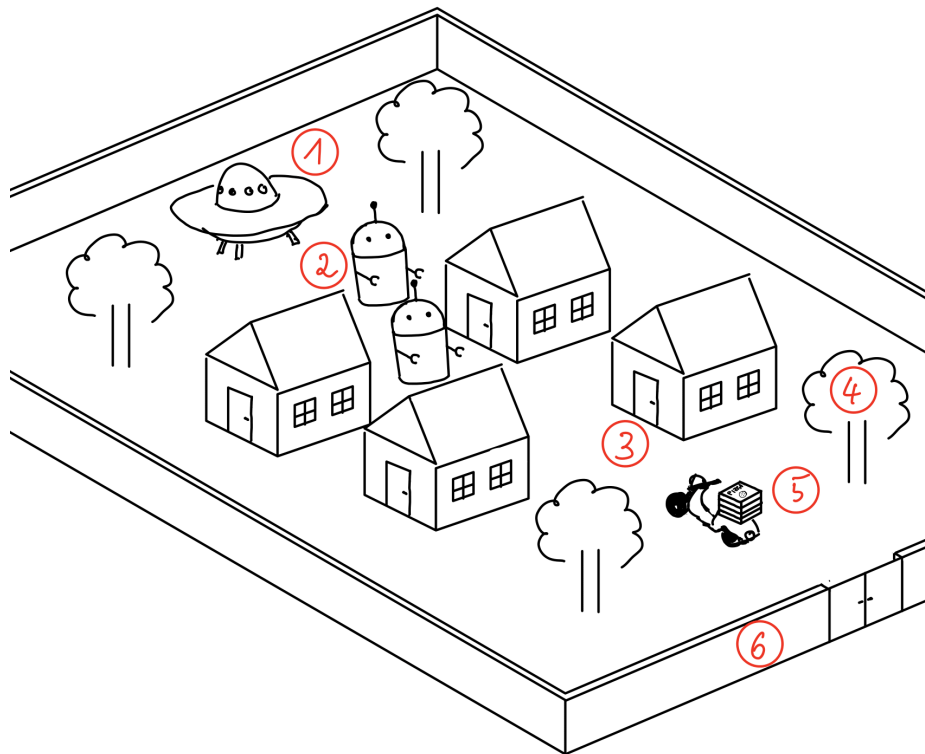


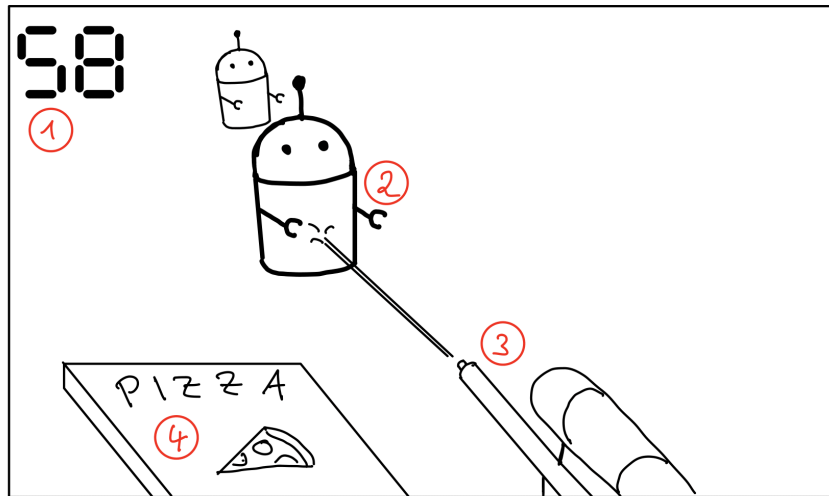
Administrative	
<b>Group Name / Game Name</b>	Alien Robot Pizza Panic
<b>Git Hub Link</b>	<a href="https://github.com/asciugando/ptvc24-AlienRobotPizzaPanic">https://github.com/asciugando/ptvc24-AlienRobotPizzaPanic</a>
<b>Students</b>	Elizaveta Ashugian, 11843982 Jörg Christian Reiher, 12213117
<b>Genre</b>	Shoot and Run
<b>Goal</b>	Shoot enemies and deliver pizzas on time
<b>Graphics API</b>	Vulkan
Game Idea and Content	
<b>Story (max. 4 sentences)</b>	You are a simple pizza deliver*In working your shift, but oh no! Alien robots are trying to steal your pizzas! Deliver all the pizzas before they get cold and get rid of the robots!
<b>Gameplay (max. 4 sentences)</b>	Delivery person is moving around suburbs delivering pizzas to the designated households. You can shoot the enemies with a watergun, but hurry up! The pizzas are getting cold
<b>User interaction</b>	<ul style="list-style-type: none"> <li>• WASD: Player movement</li> <li>• Mouse: Camera view direction</li> <li>• Left mouse-click: Shoot the watergun</li> <li>• Space: Jump</li> <li>• ESC: Quit</li> </ul> 
<b>3D Objects</b>	Static: <ul style="list-style-type: none"> <li>• Houses</li> <li>• Trees</li> <li>• Rocks</li> <li>• Pizza delivery car/scooter</li> <li>• Spaceship</li> </ul> Dynamic: <ul style="list-style-type: none"> <li>• Alien robots (enemies)</li> </ul>

	<ul style="list-style-type: none"><li>Watergun (can shoot alien robots)</li></ul>	
Scene lighting	<ul style="list-style-type: none"><li>Sun - directional light (sun)</li><li><del>robots – point light</del></li><li><del>spaceship – point light</del> </li></ul>	
Features		
Category	Feature	Description (Usage)
Optional Gameplay	Collision Detection (Basic Physics) (4 Points)	Player colliding with the street floor, environmental objects
	Heads-Up Display (4 Points)	 Display text spoken by <del>pizza delivery person when getting pizza delivered</del>
Effects	Lighting: Shadow Map with PCF (16 Points)	Realistic shadows
	Animation: Hierarchical Animation (4 Points)	Rotating heads and arms of the robots whilst moving
	Texturing: Specular Map (4 Points)	Adding realistic shine to metal robots in real time
	Shading: Simple Normal Mapping (4 Points)	Realistic shading effects to walls of the houses/stone street terrain

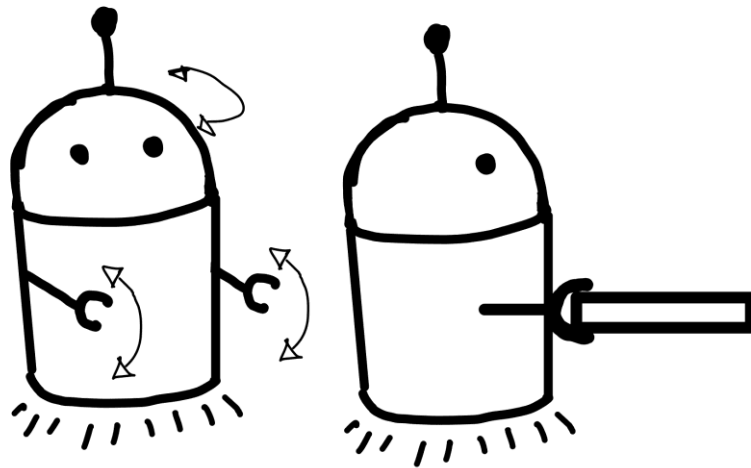
## Sketches



- ① UFO spawning robots
- ② Robots try to steal pizza and bring it to the UFO
- ③ Deliver one pizza to each door
- ④ Objects have collision detection
- ⑤ Pile of pizzas to be delivered and guarded from robots
- ⑥ Wall limits playing area



- ① Countdown how much time left to deliver the pizzas
- ② Robots try to steal pizza from player and pile.
- ③ Water gun : Steals robots for a while, 2m reach
- ④ Player can carry only one pizza!



- Head and arms of robot constantly rotate.
- Robots hover above ground
- Bottom surface of robot glows (point light)
- Robots can carry only one pizza