

World in Conflicts

Rev 1.0

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Chapter 1

Preamble

1.1 Project Description

Chapter 2

Player Interaction

2.1 Camera

- Bird-Eye View.
- User can rotate only along the Z-axis.
- User can traslate the camera along all axes.
- Blocked by:
 - Terrain.
 - Water.
 - Buildings.
 - Edges of the map.
 - Maximum altitude.
- Any non-blocking entities that collide with the camera will become transparent with a design-modifiable alpha value.

Chapter 3

AI

3.1 Unit Controller

1. Receives input from Player or Mastermind Controller.
2. Inputs are Actions, that are decoded into smaller tasks.
3. Outputs are events that are sent to the Player or Mastermind Controller.

List of outputs:

Output	Trigger	Data Sent
Enemy Spotted	Whenever an enemy that was hidden, appears.	Spotted AActor.
Suffered Damage	Got hit by an unknown attacker (like artillery, or hidden enemy).	Self.
Got Attacked	Got hit and I know who is.	Attacker AActor.
Less Than % HP	Design-configurable list of percentages that when the HP is below that, will send the event. In case of multiple thresholds being triggered in the same frame, only the smallest will be sent.	Self.
Dead	When the unit dies.	Self and Killer AActor.
Killed Enemy	When this unit kills another one.	Self and Killed AActor.

3.2 Mastermind Controller

1. Long/Mid/Short-term Plans.
2. Real Military Strategies.
3. Decisions go from Top to Bottom, while Reactions go from Bottom to Top.
4. Receives inputs from Unit Controller's Outputs.
5. Long-term Plans:
 - (a) Win the battle
 - (b) Defend Allies
 - (c) Support Allies
6. Mid-term Plans:
 - (a) Define goals that are required to accomplish the Long-term ones
 - (b) Capture Control points, defend them, stall enemy, reinforce ally, transport troops etc.
7. Short-term Plans:
 - (a) Define goals that are required to accomplish the Short-term ones, and make the AI more reactive and life-like.
 - (b) Those are the only ones that are actual Actions sent to the various Unit Controllers.