Tank World Technical Guidance of Developing External Players

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The external player is embodied by a DLL that depends on TankWorld.Core DLL and used by TankWorld.GameManager DLL. See Figure 1

The major types and their dependencies are demonstrated in figure 2. For detailed information of every class and every function, please check the comments of them.

The types a developer should pay attention to are *IPlayer*, *BasePlayer* and *PlayerAttribute*. An external player class must implement *IPlayer* Interface directly or indirectly. In the indirect way is to inherit *BasePlayer* Class which implements *IPlayer* Interface. The external player class must be decorated by *PlayerAttribute* Attribute and the *DisplayName* Property must be given. This is used by the UI to distinguish between external players.

The player classes will be used by *GameManager Class*. The GameManager class will organise the match between two players and be the judge of the game. The GameManager Class firstly creates the map. It then creates two players from internal or external player classes. The player instances will be given several parameters including the opponent or the other player, the map, two tanks on the map. The enemy tanks can be accessed by the opponent property. Each item on the map can be accessed via the map instance.

The external player DLLs are put into the *plugin* folder as well as other related files, so please point your files in the plugin folder.

1 Conventions

A player class name must ends with -Player. Although it does not affect the execution, a meaningful name is very helpful.

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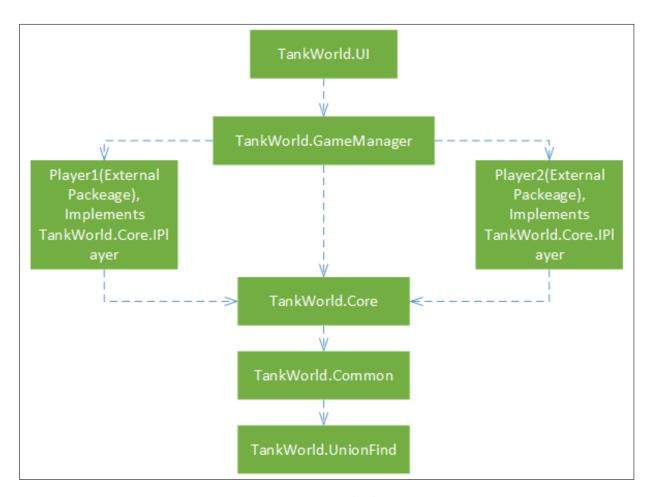


Figure 1: External Player

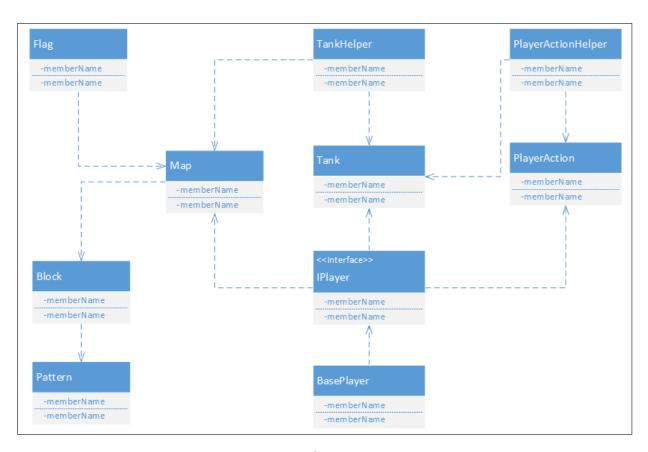


Figure 2: Core Types