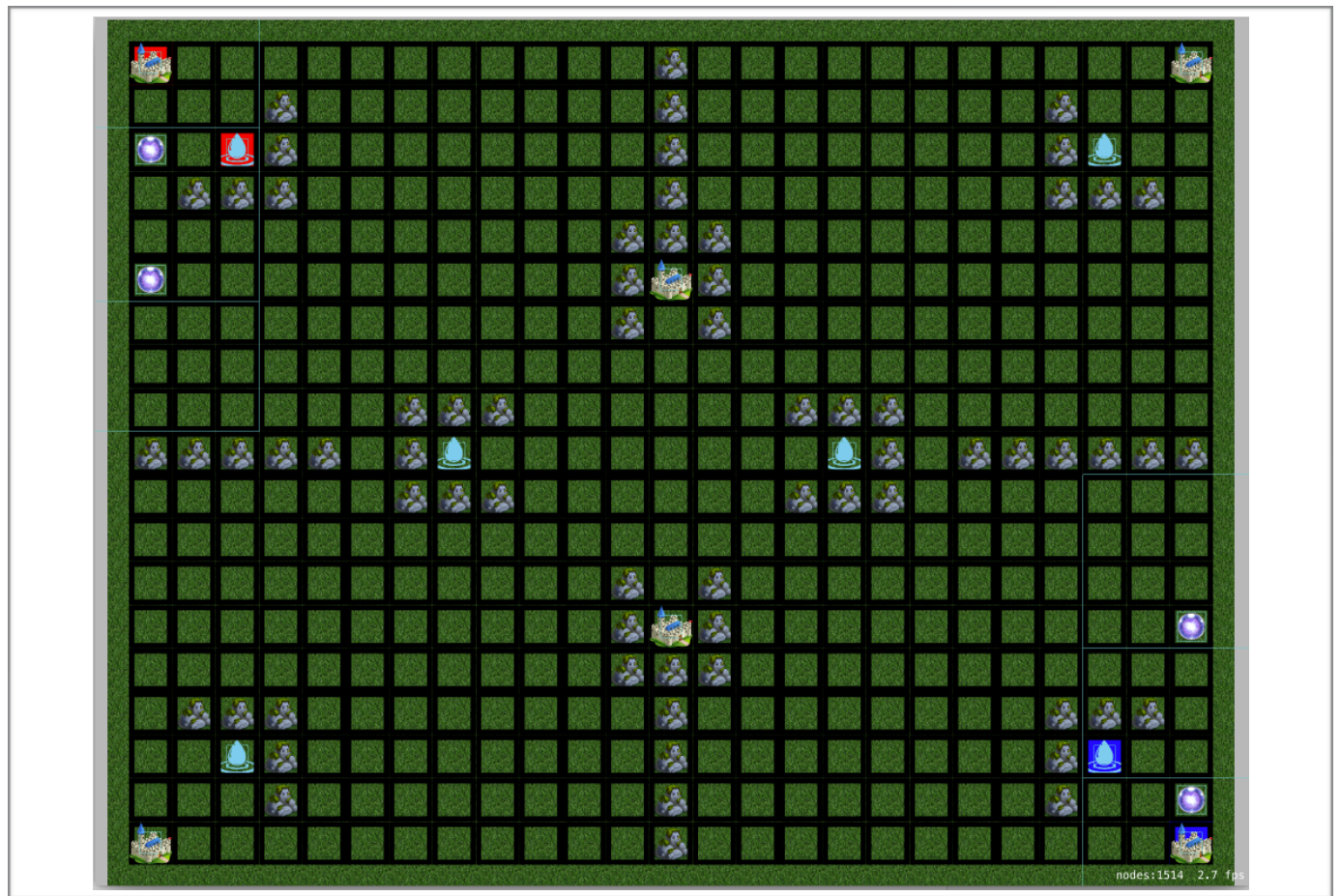


# Pixel Wars



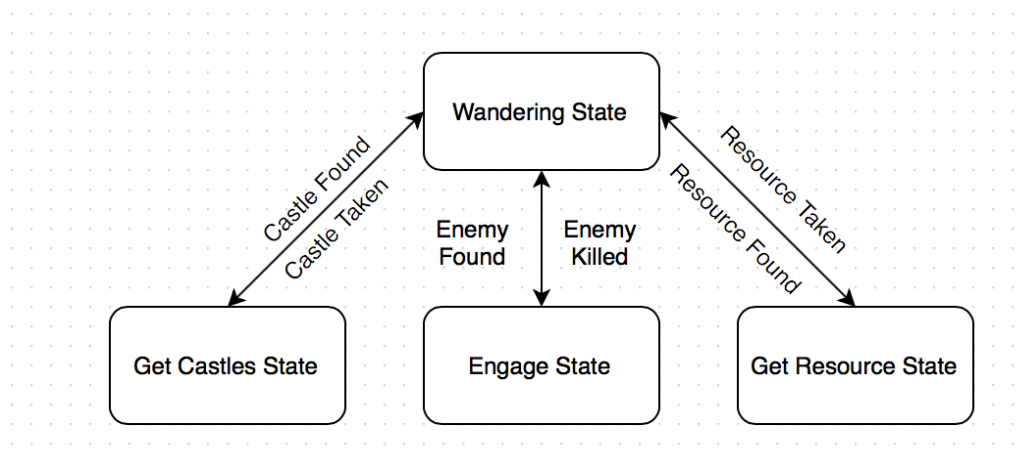
# Used Technologies

- Xcode
- Objective-C
- SpriteKit

## Game Components

### *AI behavior*

- Algorithms.h/.m - contains BFS which the AI uses to move around the map and the Node class definition used in the BFS.
- StateMachine.h/.m - contains the AI state machine.
- State.h - is protocol class ( or something like pure virtual class in C++) used for the basic functionality which each state should implement.
- WanderingState.h/.m - is the default AI state, which is used by the AI to move around.
- CaptrueCastleState.h/.m is - is the state in which the AI goes when it sees castle(spawning point) in range.
- CaptrueResourceState.h/.m is - is the state in which the AI goes when it sees resource in range.
- EngageEnemyState.h/.m - is the state in which the AI goes when it encounter an enemy in range. (The choice between the above 3 states depends on which object is closest to the Agent (AI) ).



## *Map Objects*

- Map.txt - is the file from which the map is loaded and populated ( it size is 19x25 so it could fit on screen). There shouldn't be problems with bigger maps (maybe memory because of SpriteKit).
- MapTile.h/.m - is basic map tile class from which all other classes inherit.
- AgentTile.h/.m - is the Agent (AI) object which uses the state machine to take decisions.
- CastleTile.h/.m - is the castle object which spawns agent each 5 sec. or faster depending on the player's resources.
- ResourceTile.h/.m - is the recourse tile used by the Players to increase their castles spawning speed.
- GameScene.h/.m - is the main game scene.