AndroidWars Task List

# Milestone 1: Unit Control

* Generic Tile class
* Tile stores reference to common TileType
* Basic Player class
* Certain Tiles can be owned by a Player
* Tiles draw with owning Player’s team color (or neutral color, if not owned)
  + Initially just a tint applied to sprite
* Game creates multiple Players when the Game is initialized
* Game gives each Player ownership of a Headquarters (based on loaded map data)
* Generic Unit class
* Unit stores reference to common UnitType
* World can create and destroy Units
* Units draw with owning Player’s team color
* Unit has exactly one MovementType
  + MovementType keeps track of all TileTypes it can move through and the cost to move into that TypeType
* User can tap screen to select a Unit
* With a Unit selected, Game draws all reachable tiles from the currently selected Unit (based on MovementType of Unit and **best possible** total MovementCost to enter that square)
* Basic Path class
* Dragging from the selected Unit to a reachable tile changes the pending Path for the current Move
  + Draws an arrow on the UI to that location (along the path)
  + Path keeps track of each Tile entered along the way
  + Path keeps track of accumulated movement cost
  + An additional square can only be added to the Path if the total movement cost for entering that square through the Path is less than the unit’s available movement points
  + Dragging over the previous square in the path pops that square from the Path
  + Units cannot move through enemy Units
  + Units cannot end turn in tile occupied by another Unit
* Basic Turn and Move/Action info/struct/class
* Game keeps track of current turn and which Player’s turn it is
* Simple UI button class
* Game draws “End Turn” button
* Tapping “End Turn” button goes to next turn (passing control to next Player)
* Simple UI menu class (composed of buttons)
* After moving, UI shows menu with multiple options for ending a move (initially just “Wait” or “Cancel”)
* User can choose “Cancel” from action menu to go back to moving the unit (i.e. unit returns to its previous position, popping the pending move from the queue of moves for this turn)
  + Will want to do this with UI states of some sort that can be pushed/popped
* Player can select end of move by tapping option on action menu
* After selecting **any** action (besides “Cancel”), the Unit becomes “exhausted”
* Exhausted Units draw darker

# Milestone 2: Attacking and Capturing

* A TileType can be flagged in the editor as “capturable”
* Units can Capture when finishing a move in a capturable square (depending on ending square TileType)
* Capturing a Tile causes ownership of that Tile to change to the owner of the capturing Unit (initially happens instantly)
* Units have health
* Capturing takes more than one turn (i.e. Unit subtracts current health from Tile’s current capture points until capture points reach zero)
* Units capturing a tile are marked as “Capturing” and draw the capture icon
* Capture points of Tile being captured are restored if capturing Unit takes a non-Capture action while capturing (or dies)
* Units can have Weapons with range, list of other UnitTypes that it can attack, and how much damage is done to each UnitType
* After moving, game creates list of possible attack targets around Unit if it has at least one Weapon
* Units can end turn with Attack action if there is an enemy Unit that can be targeted by at least one of its Weapons
* Game draws target symbol over possible attack targets
* After selecting Attack action, user can select which unit to attack by tapping it
* Tapping a target applies damage to the selected enemy Unit based on weapon damage
  + Game calculates **predicted** damage of all possible weapons against that enemy
  + Game chooses most effective weapon based on **predicted** damage amount
  + Game calculates “real” damage applied with a small amount of randomness (i.e. +/-1 point of damage)
* When selecting a target, user can press “Cancel” button to go back to the action menu