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**Redefined Use Cases (milestone 1, 2 and 3):**
- Attack a unit that has modifiers such as terrain bonuses or fortification.
    This is taken into account in the fighting sequence diagram.
- Attack a unit with a defense of 0.
    This entails that the unit is automatically destroyed when the collision in fighting happens.
- When moving onto a mountain (or similar difficult terrain) take into account the movement modifier of the tile
    This is taken into account for our latest terrain movement sequence diagram and is part of the pathfinding.
- When you move over a tile with a road (or railroad) take into account the movement modifier of the tile
    This is also taken into account in our latest terrain movement sequence diagram and is part of pathfinding.
- <u>Queue up a movement path with pathfinding that covers multiple types of terrain and modifiers</u>
    This is handled by our pathfinding and can be seen in the latest version of our terrain movement sequence diagram.
- Save a game that is currently under way in order to quit and continue it later
    This entails us taking the current state of the game and storing it in a file that is to be loaded at a later time.
- Load a saved game from a file
    This entails being able to open the save document and rendering all the specified tiles and units/cities.
- Start a new game for 2 players
    This entails generating a map from a text file that has two starting locations. You may achieve this by selecting these options when starting a game.
- Win a game
    This entails a player being the last player to be alive. Players are alive when they still have a city. A win game check is done if a city is destroyed.
- Queue up a movement path that has been found via a path finding algorithm to be the most efficient manner of moving
    This algorithm will take into account several things such as: distance, impassable tiles, obstacles, movement costs, roads, etc.
- <u>Use a combat unit to attack an enemy unit</u>
    This entails a player moving his unit into an enemy unit, at which point in time each unit takes damage accordingly. There are two outcomes here, they are:
    a. Kill the enemy
        This entails removing the enemy from the map and the tiles unit array.
    b. Get killed by enemy
        This entails removing your unit from the map and the tiles unit array.
- Use a combat unit to attack a city (both with and without units in it)
    When the city has units in it (fortified or not) a combat will occur in the same manner as the last use case. If the city does not have units or has lost all its units then the city is randomly decided to either be destroyed or taken over.


- Open the research menu and select a technology path
    This entails us creating a new Research View and passing it the player's current research advancements then allow the player to select his next research path.
- Press the turn done button to signify the end of your turn
    This entails that the screen would switch to the next players turn, and that everything which occurs at the end of the turn occurs.
- Change the resource that a city is using
    This entails the opening of the City View pane (by clicking on a city) then selecting a resource that is not already selected from within the Cities area

- Increase the level of your city and assign it a new resource to collect
    This entails that you have been collecting enough food for your city to grow to cause it to level up. To assign it a new resource you can follow the above use case.
- Change what your city is producing
    This is similar to one of our sequence diagrams.
- Pull up a help document for any aspect of the game, units, movement, production, etc.
    This entails you selecting a help menu item from the main View causing a dialog box to pop up.
- Surrender/Quit game
    This causes your towns to stop producing units and to sit idle. This means that it is easier for players to take your towns. If you leaving means the other player is no longer playing against someone then the other player automatically wins.
- Load a unit into a transport
    This entails you moving your unit onto the same tile as the transportation unit. This unit then joins the transport and moves with the transport when the transport moves. The unit can then leave the transport by clicking the transport and selecting the unit from the unit viewer and moving the unit.
- Use a worker to Build a tile modification (road, irrigation, etc.)
    This entails a user selecting the unit and then pressing a hotkey corresponding to the desired action. The unit then performs this action if it is not out of action for the turn otherwise it is queued up to occur the next turn.
- <u>Create a city using a 'Settler' unit on a land tile.</u>
    This is done by selecting the settler on the map then pushing the b button to build the city.
- Apply a name to a newly created city.
    This occurs when you create a city and a dialog box pops up allowing you to name your city.
- <u>Create a 'Warrior' unit from a city.</u>
    This entails that the user opens the city view and selects a warrior from the drop down menu. He/She must then wait the appropriate amount of turns for it to be created.
- Create a more advanced unit from a city
    This entails that you have the necessary research to create that unit. Then you can just select a unit to build within City View and it is made after several turns.
- Create a Settler from a city (should reduce level of city by one).
    This is the same as creating a unit except the level of your city is reduced by one as your population decreases when you make the settlers.
- Cancel the creation of a unit.
    This entails you to open the CityView and to chose to stop producing.


- Attempt to move a unit to a tile that will take more than one turn (Should queue up).
    This entails the user to click on a unit and select g then drag the path to a distance that is greater than that units max movement per turn. Note that a G appears above the Unit.
- Move a water unit over ocean tiles.
    Similar to moving a unit regularly except a water unit cannot go on land unless a city is on the land tile.
- Move an air unit over ocean tiles.
    Similar to moving a unit regularly.
- Move into an owned city
    After doing so you may select this unit by opening the CityView, going to the selection combo box and then choosing the unit to control that is in the city.
- Move into an owned unit.
    After doing so when you click on the tile a unit selection box pops up that allows you to select which unit you want to control.
- <u>Move land unit over ocean tile (shouldn't be possible).</u>
    Done as sequence diagram.

- Move ocean unit over land tile (shouldn't be possible).
    This is similar to the use case above.
- <u>Display map of terrain of size 10 by 10 (units in tiles)</u>
    Within the code you may set the viewing size of the map by removing and adding comments within the MapView file. By doing so a different sized map will be loaded when the program begins. By default what we see of the map is set to 19 x 21 tiles.
- <u>Move map view north by five units</u>
    You may do this by right clicking on the map 5 units north or using the "wasd" keys to move the view.
- <u>Move player's character west by five units</u>
    This can currently be completed by selecting a unit, pushing "g" and then left clicking on the map where you wish them to finish.
- Move a unit into a transport
    This entails the user moving a unit onto a tile that a transport is on.
- Moving units out of a transport
    After the transport reaches its destination you simply click on the transport and a dialog box will pop up if a unit is inside. This unit is now selected and can be moved from that tile by pressing g.