Progress Log (Jan)

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:≡ Tags	

December 31th 2022

- Implemented PlayerStat and StatModifier classes
 - PlayerStat class allows for the implementation of new player stats
 - StatModifier class allows for items to enactment the player stats
- Learned how to use Statmodifier to class to implement items

January 1st 2023

- Learned scriptable objects, inventory systems, and item implementation using scriptable objects
- Learned about abstract classes and its possible uses with scriptable objects

January 2nd 2023

- Created basic scriptable objects for all types of items in the game (trinkets, resources, backpacks, powerup). However, no functionality has been added to the item objects.
- Created basic inventory scriptable object (could be used for all types of inventories such as shops, banks, etc.). Inventory object lacks capacity parameter.
- Created basic display for inventory. No sprites or graphics has been added to the inventory display yet
- Created basic test items for all item types. No functionality yet

- Created item pick up system. No check for if inventory is full
- Created item stack-ability system. No check for item types (should only stack for resource item types)

January 3rd 2023

- Created item database scriptable object
- Added a uniquely generated ID value for each item

January 4th 2023

- Created display slots for when inventory is empty
- Created method to increase/decrease inventory capacity
- Created item deletion method. No functionality yet
- Create check for if inventory is full
- Completed item stack-ability system

January 5th 2023

- Implemented player stats
- Implemented trinket functionality (boosts stats on pickup)
- optimized inventory system. Only updates inventory UI on item pickup, rather than constantly updating inventory UI

January 6th 2023

- Implemented 8-directional shooting
- Optimized shooting system
- Integrated shooting system into player controller script. (before it was in a different script)

January 7th 2023

- Added heart health system scripts from dungeon man project. No testing done
 - Includes health damage method
 - Includes health healing method
 - Includes half heart functionality
 - Includes max health upgrade system
 - Includes UI display
- · Create heart sprite placeholder

January 8th 2023

- Added more TODO tasks to the project
 - Inventory System
 - Item Functionality
- Implemented smooth camera follow
- Fixed bug with player collision with obstacles. Player used to slide when collided with an obstacle

January 9th 2023

Nothing was done on this day

January 10th 2023

Nothing was done on this day

January 11th 2023

Nothing was done on this day

January 12th 2023

- Split InventoryDisplay script into StaticInterface script and DynamicInterface script (This allows for the creation of code generated slot inventories and custom generated slot inventories)
- Created sperate inventories for trinket, resources, and power-up items
- Created a method for items to go to their respective inventories
- Removed stackability for resources items and added stackability for power-up items

January 13th 2023

Nothing was done on this day

January 14th 2023

- learnt unity's event triggers
- · Created tooltip prefab

January 15th 2023

- Tooltip appears and disappears on item hover. Only appears if slot has item
- Tooltip has appears with correct: item name, item type, and description. Stats of item does not appear yet
- Stats text only appears on tooltip if item is a trinket.

TODOS for tooltip:

- Make tooltip appear next to slot correctly
- Make tooltip display stats of trinket
- ✓ Make tooltip expand with the number of stats
- Make tooltip more appealing
- Finished TODO list

January 16th 2023

• Implemented item inventory drag system

January 17th 2023

- · Implemented item swapping functionality
- · Implemented item deletion
- Created prefab for "item delete" prompt

January 18th 2023

- Items now can only be swapped within the same inventory
- Fixed bug where items were dropped between the gaps of inventory slots
- Implemented item drop prompt,
 - On item drop, prompt appears in asking the player if he wants to drop item
 - Pressing the yes button drops the item
 - Pressing either the no button or top right "x" button closes the prompt without any changes
- Implemented main inventory open/close upon pressing "b"
- Implemented resource inventory open/close upon pressing the button under the main inventory
- Mouse goes invisible when inventory is closed and visible when inventory is open

January 19th 2023

- Bug Fixes:
 - Items would not display if it was picked up while inventory was closed (fixed)
 - Tooltip would not display after item swapping (fixed)

January 20th 2023

- Bug Fix: NullReferenceExpection when inventory capacity increases
- Implemented method to increase/decrease main inventory capacity

January 21th 2023

Nothing was done on this day

January 22th 2023

Nothing was done on this day

January 23th 2023

Nothing was done on this day

January 24th 2023

- Tested trinket functionality
- Implemented stat display panel
- Added functionality to stat display panel (On trinket pickup, the stat display panel updates)

January 25th 2023

- Fixed linking error with inventory slots when updating the main inventory capacity
- Power-up items are now only stackable to 99
- Slightly reworked player health script
- Added effects scriptable object class that power-up item can use. New effects can be easily created for future power-up items
- Added power-up item use method to use effects on item

Organized unity project folders/scripts

January 26th 2023

- Implemented hot bar functionality. Pressing '1' uses power-up item in the first slot. Pressing '2' uses power-up item in the second slot.
- Power-up items are consumed when used
- Implemented health potion effect

January 27th 2023

- Added 2 backpack scriptable objects:
 - Backpack Lvl 1, holds 5 inventory slots
 - Backpack Lvl 2, holds 10 inventory slots
- Changed default inventory size to hold 5 inventory slots
- Player can pick-up backpacks. On backpack pick-up, the current backpack is dropped and the new backpack is equipped
- Backpacks store their data when dropped. On backpack pick-up, the items in the backpack are added to the player inventory

January 28th 2023

Nothing was done on this day

January 29th 2023

Nothing was done on this day

January 30th 2023

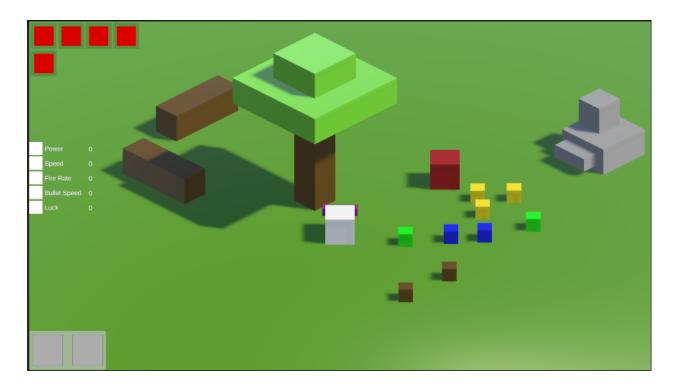
- Implemented Perlin noise class
- Added method to display Perlin noise as black and white plane

January 31th 2023

- Implemented mesh generator for terrain
- Implemented height map for map generation
- Added texture for terrain (to be changed later)

Monthly Summary:

Days without progress: 9 days out of 32



Character:

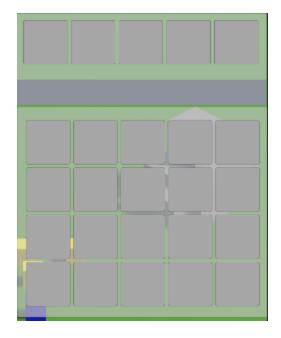
- Player health: Player can take damage, heal, and upgrade health.
- Movement (buggy): Player can move using "WASD". However, moving on the y-axis is faster than moving on x-axis too be fixed later
- Shooting (for testing): The player can shoot bullets using the arrows keys in all 8 directions. Between each shot there is a delay (fire rate). On collision, the bullet is deleted. If the bullet hits an enemy the enemy is damaged. If the bullet goes off screen it is deleted. Character looks in the direction of shooting

- Modifiable player stats: fully implemented stat class. Not functional yet
 - Power
 - Speed
 - Health
 - Fire-rate
 - Bullet Speed
 - Luck
- Functional player panel stats. Bug: stats don't update with items lost/gained from new backpacks
- Player can hold backpack
- Player Collision

Inventory:



- Implemented Inventory scriptable object with dynamic and static inventories. More
 inventories can be easily added to the game. Currently, player has 3 inventories:
 main inventory, resource inventory, and hot-bar inventory. the image above shows
 the main inventory.
 - Main inventory: Can be closed/opened pressing 'b'. When opened, mouse is visible and vice versa. Inventory can expand/shrink on backpack pick-up.
 Inventory UI adjusts to inventory size. Holds trinkets.
 - Resource inventory: Can be closed/opened by clicking the button under the main inventory. Inventory has a static size of 20 slots. Holds resource items. If main inventory is closed while the resource inventory is open, next item main inventory is opened the resource inventory will be open and vice versa. Image below shows resource inventory+ main inventory open

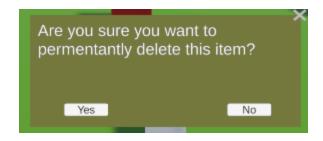


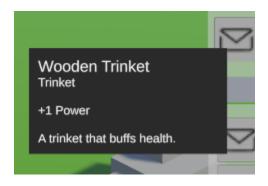
 Hot-bar inventory: Always open. Inventory has a static size of 2 slots. Holds power-up items. Pressing '1' uses item in first slot pressing '2' uses item in second slot. Image below shows hot-bar inventory



Items:

Implemented scriptable objects for each item type. More items can be easily added
to the game. Items can be picked-up by walking into them. Items can be
dragged/swapped with other slots in the inventory. Items can be destroyed by
dragging the item outside the inventory. A "are you sure?" prompt is displayed if an
item is being destroyed. Tooltip is shown when hovering over an item, adjusts to
item.







- Currently, their are 4 item types:
 - Trinkets: Modifies player stats on pick-up and item dropping. Bug: does not update/modify stats when item is lost/obtained through a backpack. Non stackable
 - Resource items: Non stackable
 - Power-up: Has scriptable object effect attached to item. When used item is consumed and all effects are executed. Effects can be easily added to the game. Stackable
 - Backpacks: Increases/decrease main inventory size on pick-up. On pick-up, old backpack is dropped and new backpack is equipped. Data inside backpack is stored in dropped backpack.

Procedural Terrain:

Early into development

