

# *Warehouse Simulator*



By Daulton Nelson

*Genre: Logistics / Simulation*

# ***“Walk up, box up, ship out!”***

- *Warehouse Simulator* is a simulation game about the logistics of working in a shipment warehouse. Players/Users will travel around a virtual warehouse in the position of an “order picker” where they'll have to find orders displayed on the screen, then collect those orders to then be shipped out to customers. *Warehouse Simulator* will utilize realistic work practices of warehouse associates in order to simulate the sensation of building up a cart of orders without having to go through the physical labour involved.

# *Mechanics (Part 1)*

- There are several mechanics to Warehouse Simulator listed below in categories and sub-categories.
- ***Movement***
  - --Walk around with WASD
  - --Drag along a cart of boxes
  - --[Potential] Automatic Camera System
- ***Order Collection (Part 1)***
  - --Triggers to tell when the player is in the correct location
  - --Number buttons to pick the self space to pick from
  - --Error Checking to make sure player is picking right order

# *Mechanics (Part 2)*

- There are several mechanics to Warehouse Simulator listed below in categories and sub-categories.
- *Order Collection (Part 2)*
  - --Order is taken from shelf and put into player inventory
  - --A timer for the player to tell them how long it's taken them to get current order
  - --A List of Orders to collect that is sorted by Warehouse layout
- *Order Collection (Part 3)*
  - --A process to check when the player has picked all orders to bring it to shipping
  - --Shipping turn in

# *Mechanics (Part 3)*

- There are several mechanics to Warehouse Simulator listed below in categories and sub-categories.
- ***Warehouse Layout (Part 1)***
  - --Floor space will several shelf types
  - --Some shelves have multiple levels to be picked from
  - --All shelves have some sort of identification that make them easy to find for player
  - --Shipping Section
- ***Warehouse Layout (Part 2)***
  - --Player cart pick up
  - --Space between shelves for player to walk easily

# Visualizations

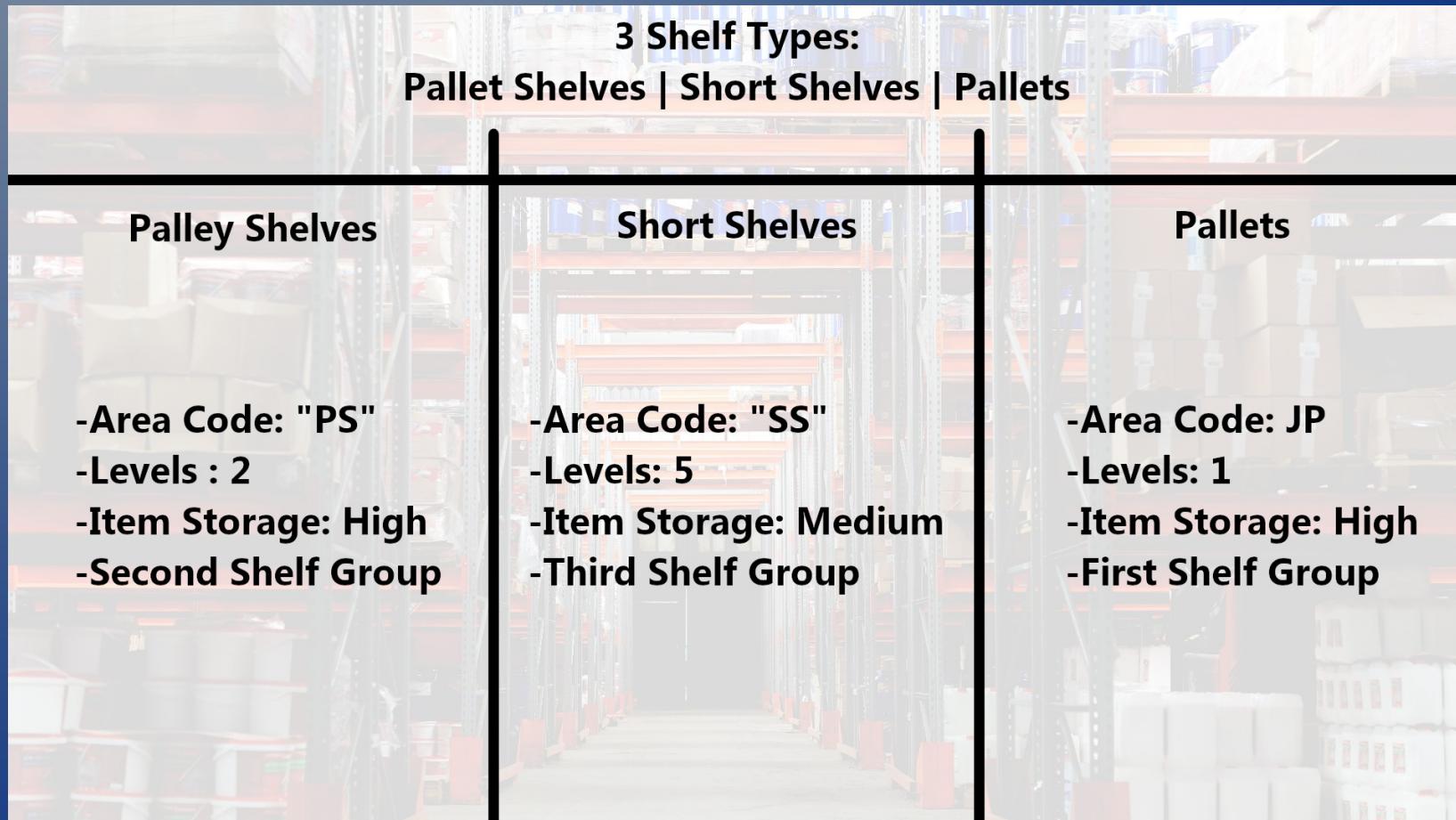
## Shelves Layout

(Pallet Shelves/Short Selves/Pallets)

	1 through 10											11 through 20										
M	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	VV	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	SS
L	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	^^	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20	SS
K	K1	K2	K3	K4	K5	K6	K7	K8	K9	K10	VV	K11	K12	K13	K14	K15	K16	K17	K18	K19	K20	SS
J	J1	J2	J3	J4	J5	J6	J7	J8	J9	J10	^^	J11	J12	J13	J14	J15	J16	J17	J18	J19	J20	SS
H	H1	H2	H3	H4	H5	H6	H7	H8	H9	H10	VV	H11	H12	H13	H14	H15	H16	H17	H18	H19	H20	PS
G	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	^^	G11	G12	G13	G14	G15	G16	G17	G18	G19	G20	PS
F	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	VV	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20	PS
E	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	^^	E11	E12	E13	E14	E15	E16	E17	E18	E19	E20	PS
D	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	VV	D11	D12	D13	D14	D15	D16	D17	D18	D19	D20	JP
C	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	^^	C11	C12	C13	C14	C15	C16	C17	C18	C19	C20	JP
B	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	VV	B11	B12	B13	B14	B15	B16	B17	B18	B19	B20	JP
A	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	^^	A11	A12	A13	A14	A15	A16	A17	A18	A19	A20	JP

# Visualizations

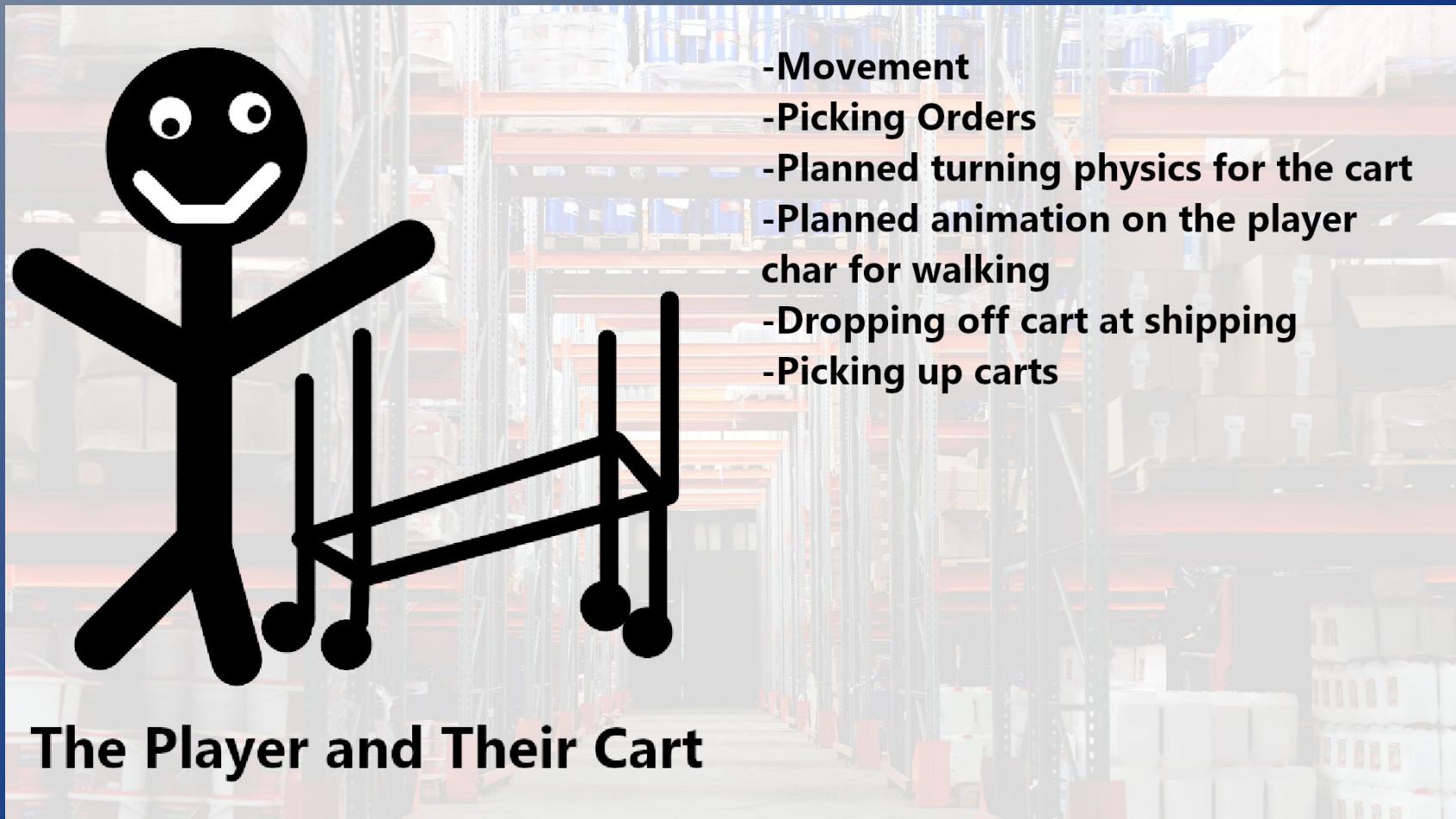
## Shelves Breakdown



<b>3 Shelf Types:</b> <b>Pallet Shelves   Short Shelves   Pallets</b>		
<b>Palley Shelves</b>	<b>Short Shelves</b>	<b>Pallets</b>
<ul style="list-style-type: none"><li><b>-Area Code: "PS"</b></li><li><b>-Levels : 2</b></li><li><b>-Item Storage: High</b></li><li><b>-Second Shelf Group</b></li></ul>	<ul style="list-style-type: none"><li><b>-Area Code: "SS"</b></li><li><b>-Levels: 5</b></li><li><b>-Item Storage: Medium</b></li><li><b>-Third Shelf Group</b></li></ul>	<ul style="list-style-type: none"><li><b>-Area Code: JP</b></li><li><b>-Levels: 1</b></li><li><b>-Item Storage: High</b></li><li><b>-First Shelf Group</b></li></ul>

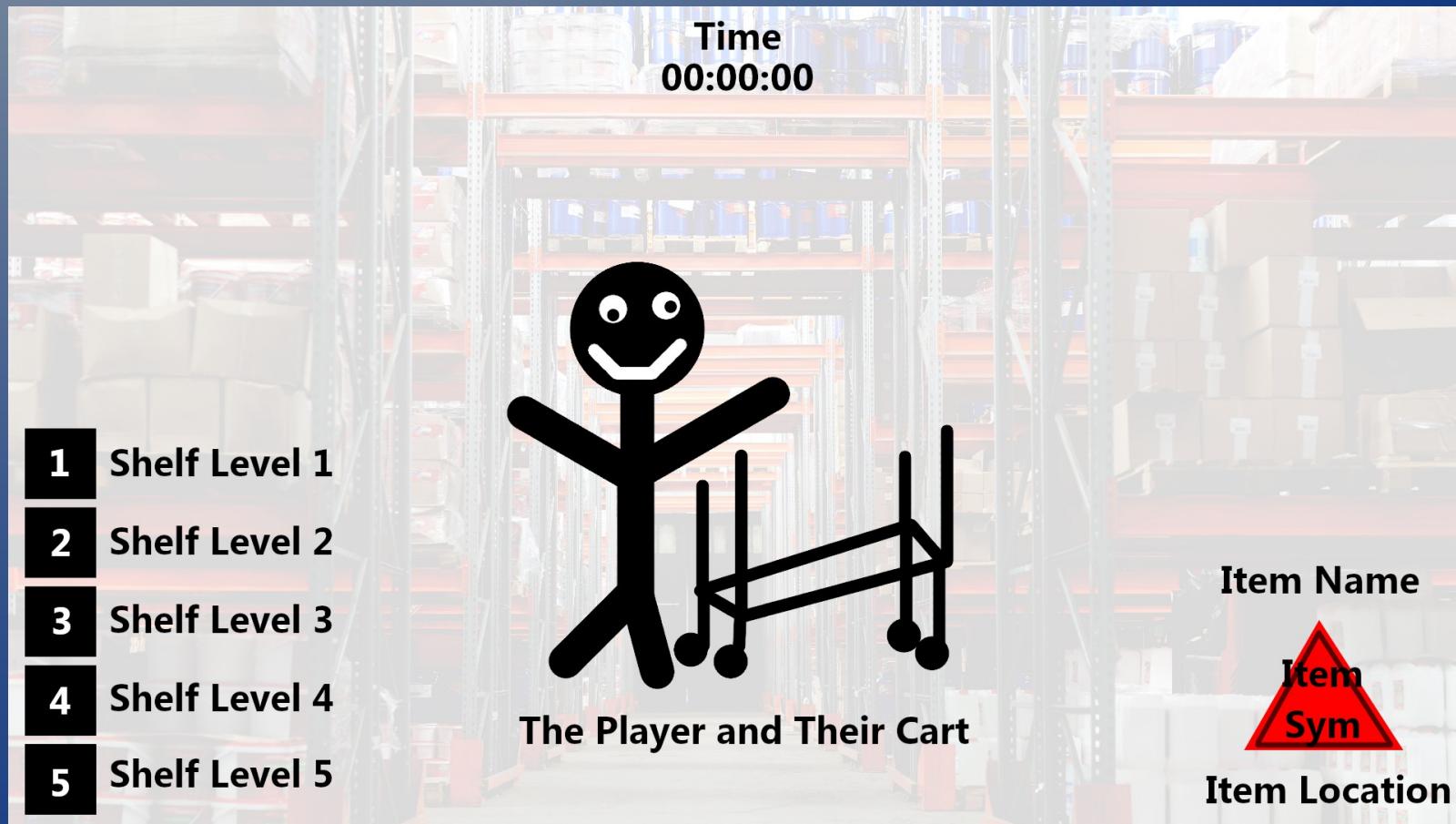
# *Visualizations*

## Player Cart



# Visualizations

## Interface



# *Staff and Resources*

- *Game Development*
- --Unity Engine
- *2D Asset Creation*
- --GIMP
- *3D Asset Creation*
- --Blender
- *Git / Project Manager*
- --GitHub



**Daulton Nelson**

Developer / Programmer / Planner

# *Target Audience*

- >= 18 yr. United States Citizens
- Potential Warehouse Workers
- Logistics Interested
- Strategy Players
- Corporate Warehouse Business looking to buy training software
- PC Players

# *Timeline*

- Start Date – 11/4
- Plan Visual – 4<sup>th</sup> or 5<sup>th</sup>
- Movement - 6<sup>th</sup>
- Start on Warehouse Layout - 6<sup>th</sup> or 7<sup>th</sup>
- Start on Order Collection - 7<sup>th</sup> or 8<sup>th</sup>
- Projected End Date – 11/26 (4 Week Project)