

Process & Thread Interaction Diagram

Process 1 – Boot loader

Main Thread

- Create Gamepad Handler thread
- Searches directory for available games
- Display games for user selection
- Fork & launch new game on selection event
- Wait and do nothing while game is in progress
- (Stretch) If no button press event in X minutes, perform an action

Gamepad Handler Thread

- Automatically search and spawns event handler threads as new gamepads are plugged in
- Creates event message queue
- 1 event handler thread per gamepad

Gamepad event Handler Thread

- Process events from a single gamepad
- If gamepad is unplugged, sends warning msg to MQ & terminate thread

Gamepad event
Handler

Gamepad event
Handler

...

Gamepad Event Message Queue

Process 2 – Game

Main Thread

- Handles multi/single player
- Handles gamepad disconnections
- Should be entirely separate from boot loader

Only 1 process will read
from MQ at any given time

