Interactive Game Console

Final Presentation

Disclosure

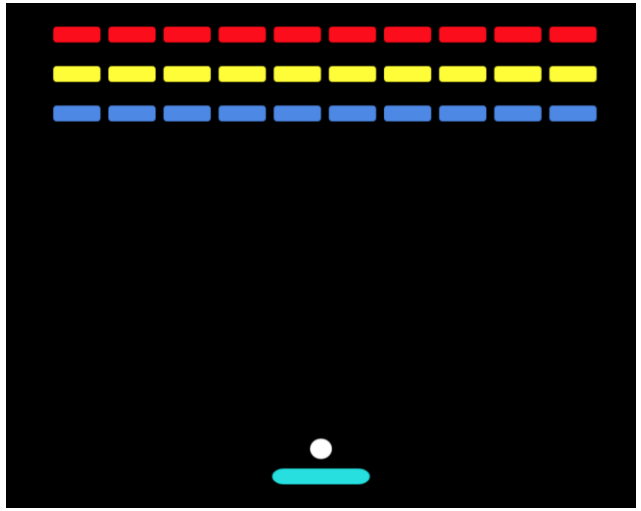
Basics

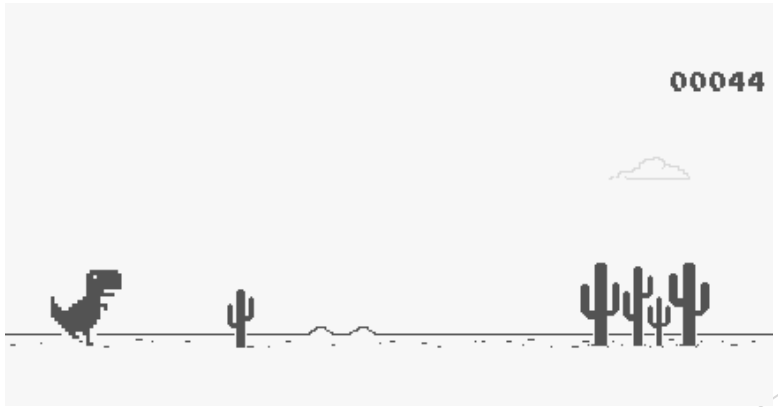
What is it?

- It’s a combination of old and new
- It brings old classics to a new control scheme
- It lets the new generation experience classics in a new interactive way
- Along are brough some new age games as well

What games would be on it?

- Pong (1 player)
- Space Wars
- Flappy bird
- Finally, Dino Game (as you know it from Google Chrome)





Why our product?

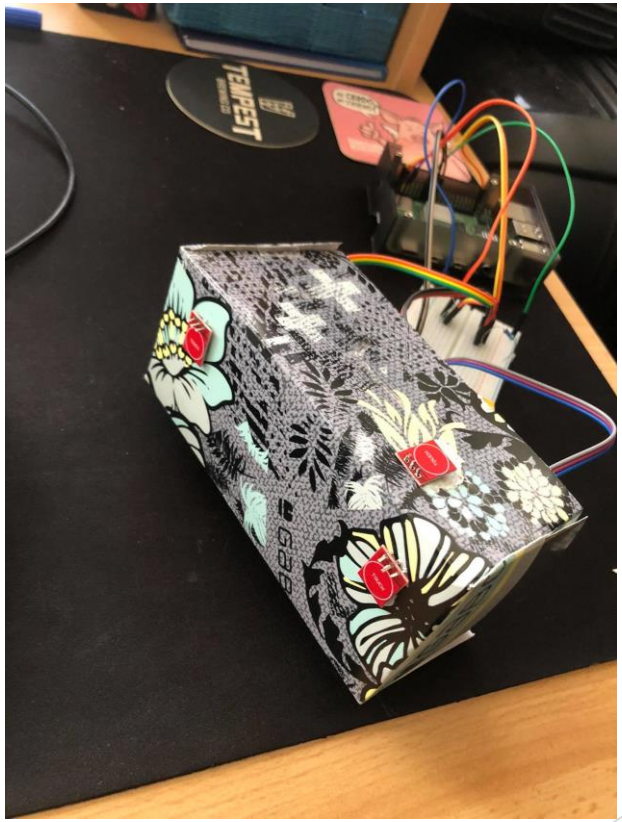
Home console

- A console built for the living room
- Suits any space – compact
- Electricity bill – usual
- Controller can easily charge overnight connected to the console
- The port selection is vast – Ethernet, 4 USB ports (2x3.0 and 2x2.0), 2 HDMI mini, Type-C for power supply

Via Digital Foundry

Portable console

- Easily transferrable to any QC power bank
- Controller detachable and connectable via Bluetooth®
- Phones, tablets and PCs can easily connect via VNC to stream the games directly to their phone
- In a future update: direct connection between controller and other device for a streaming platform



Game library/System

- Base library of 4 games for all players
- Games to include old and new classics and newly developed games
- Patches via online updates
- Newer games to be published on store/via system updates
- Subscription service
- Free game for Christmas

Creator Support (in a future update)

- Creators can publish their games on the console for a 15% cut
- Indie developers can use the market for free with support
- Games to be firstly reviewed by our team
- Additional content can always be pushed via online updates (also reviewed)
- Featured game once a month

How we achieved this?

Design

Requirements

Base:

- Full touch sensor integration
- All games playable via touch sensors
- One UI for all – system fully integrated with games
- Users should be able to view their high scores
- At least 3 games playable on launch day

Future:

- Updates online
- Creator hub

Priorities

1. Have a touch sensor functionality working
2. Have a working display interface
3. Have a first game working
4. Have options to choose between games (have the second game working)
5. Have additional games added
6. Full roadmap for future updates

Milestones

1. Deliver working code and allocation of at least 1 touch sensor
2. Deliver a working display interface
3. Deliver 1st working game within the interface with the integration of the sensors
4. Deliver the second and third game within the interface (full MVP phase)
5. Deliver additional options for the game (high scores, scoreboards, etc.)
6. Present the roadmap

Product user interface

Mockup Main menu

Programming

Python at base level

- Quick for both development and running
- Easy to integrate the sensors
- Good for casual game development
- Integrating games is mostly quick and flawless
- Easy to integrate other languages too (Pygame)

- For remote development: Gitlab
- For communication: Discord

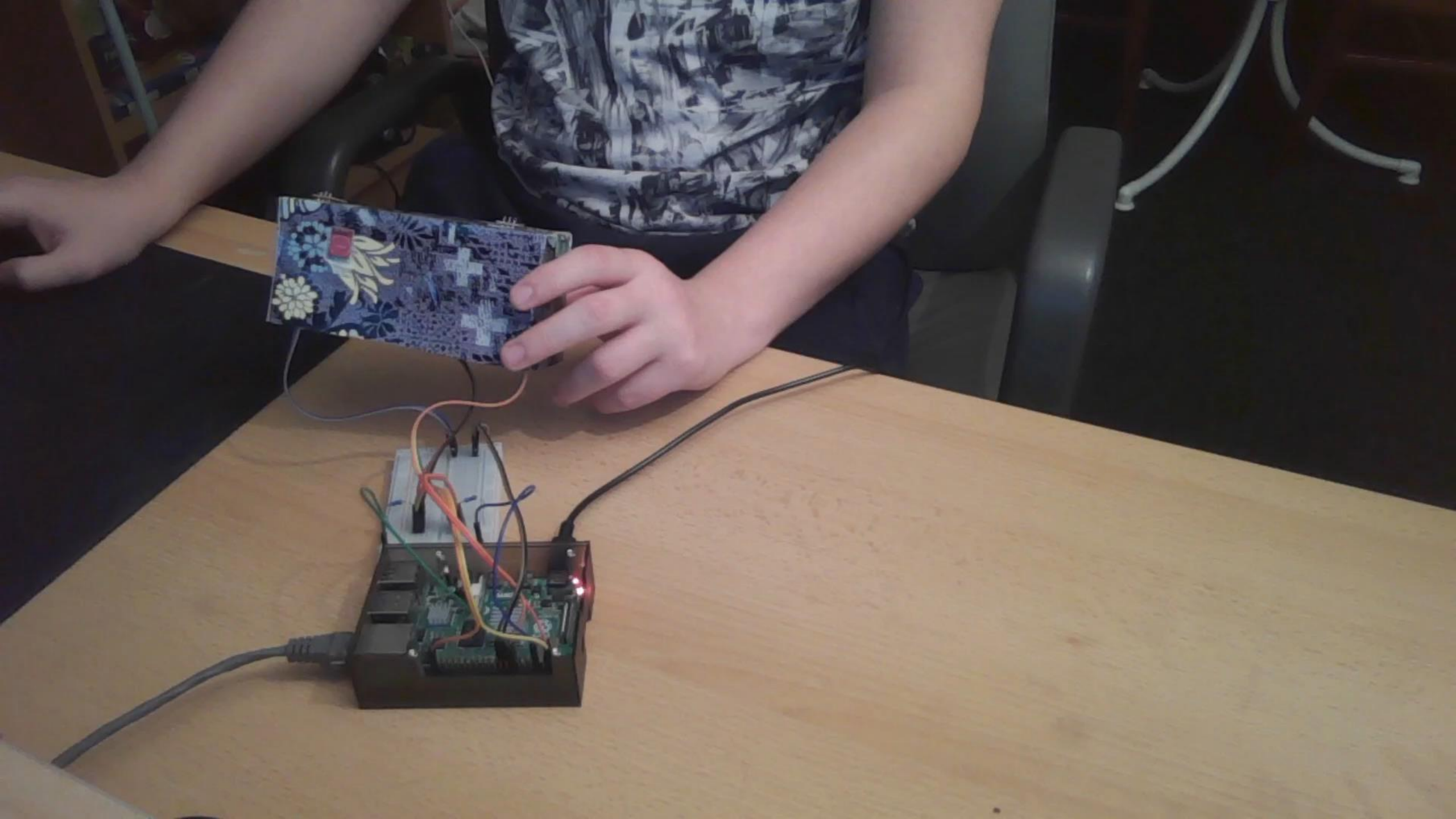
Testing

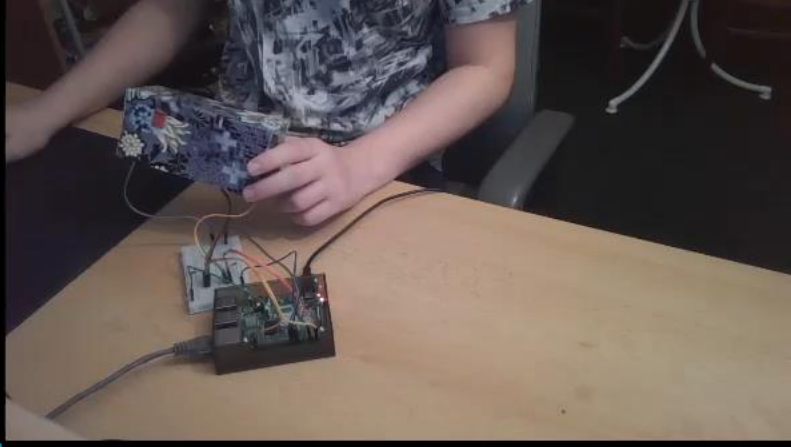
Testing

- Unit testing not possible on UI elements
- Unit testing not possible on games – randomness (except collision algorithms)
- Therefore – normal QA – playing the games

Demo time

Presented by Stefan Ilich





169.254.231.16 (pi) - VNC Viewer

Thonny - /ho... pi@pi: ~ Main Menu! 23:10

Main Menu!

WELCOME TO RETR

CHOOSE A GAME
HIGH SCORES
QUIT

s/main.py @ 41 : 1

Assistant

ute.html

```
Python 3.7.3 (/usr/bin/python3)
>>> %Run main.py

  pygame 1.9.6
  Hello from the pygame community. https://www.pygame.org/contribute.html
```

demo of controller

ENG 19:19 03/11/2020

Final reflections

Questions?