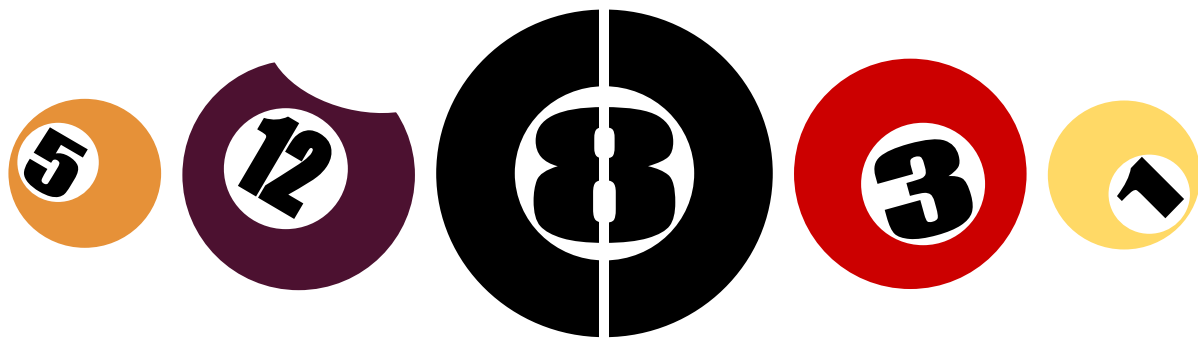# Pocket Pool

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Overview

Basic concept: Our project will display a motion simulation of pool game.

First, We detect the cue by camera using image processing.

Then, once the ball being hit, we analyze the motion track based on the algorithms we develop.

Finally, the movement will be displayed on the screen.

USEFULNESS: Our pool game would provide a new concept. People would enjoy the game anywhere and anytime.

You will be attracted by the realism of this game and it can also be used for training pool skill.

Simultaneously, it still maintains traditional game experience.

Overview

Technical specifications

Image processing: object tracking.

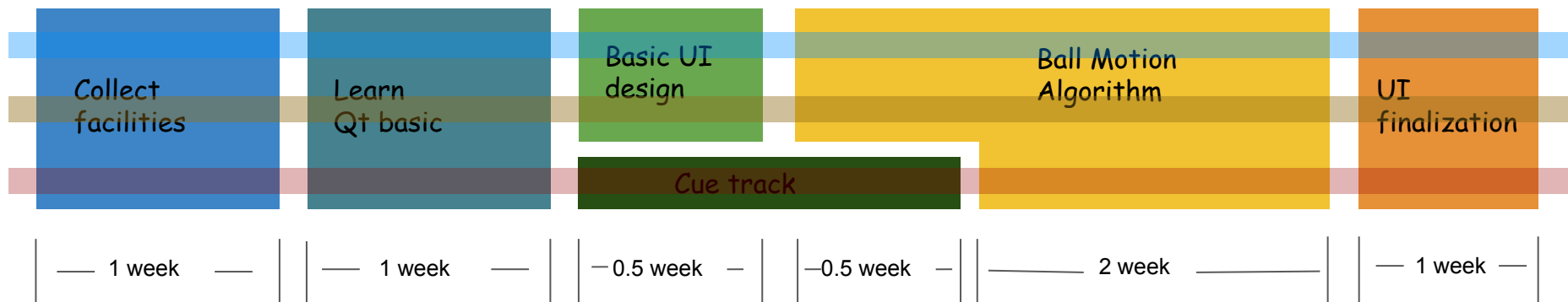Hardware Support: Acceleration and gravity sensor for parameters

Qt: Build User Interface.

Algorithms for ball motion simulation

Cross-complier: Using gumstix board and linux

Time Line

Qifan He
Shen Han
Mengyu Hang

Collect facilities

Learn Qt basic

Basic UI design

Cue track

Ball Motion Algorithm

UI finalization

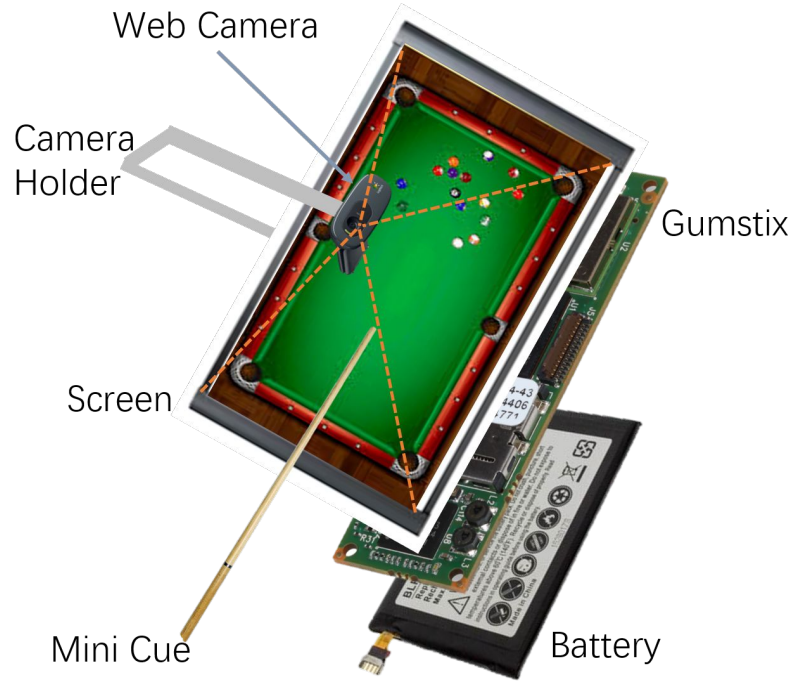| 1 week | 1 week | 0.5 week | 0.5 week | 2 week | 1 week |

GO GO GO !!

Our Goal

Finally, we would complete an

augmented-reality pool game

console like this:

Estimate Cost:

- Webcam * 1 $25
- Battery * 1 $15
- Camera Holder $15

Web Camera

Camera
Holder

Gumstix

Screen

Mini Cue

Battery

Q&A

Thanks!