# CG4002: Computer Engineering Capstone Project

Game Play

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Slides adopted from Prof. Peh Li Shiuan

### Game Rules

### Rules (No Change)

- Health Point
  - Player: 100 HP.
  - Shield: 30 HP/10 Sec
- Damage
  - Bullet: 10 HP
  - Grenade: 30 HP

### Rules (No Change)

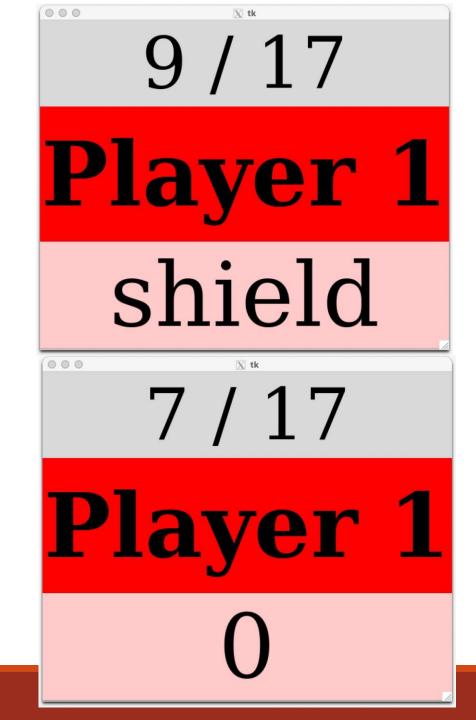
- Ammo and constraints
  - Unlimited magazines
    - 6 bullets per magazine
    - Reload can be performed only if the magazine is empty
  - 2 grenades per life
  - 3 shields per lifetime
    - Cannot activate shield within 10 sec of previous activation, even if 0-HP
  - Delays
    - Grenade impact has 2 Sec delay on Visualizer
    - Rebirth is instantaneous

#### **Metrics**

- Correctness
- Response Time
- Consistency
- Resilience
- User Experience
- Form Factor

# Individual Test (Week 11)

- Any one from the team
- Player will
  - Wear the sensor
  - Have gun
- Vest, will be registered as player 2
  - Will be kept at a distance from the player
- Screen recording to be submitted



Group Test (Week 13)

- Any two players from the team
- Players will be fully geared
- Choreographed sparring.





#### **Evaluation Server**

```
JSON Received P1:
                                                JSON Expected P1:
{'hp': 4,
                                                {'hp': 4,
'action': 'none',
                                                'action': 'shoot',
'bullets': 3,
                                                 'bullets': 3,
'grenades': 17,
                                                 'grenades': 1,
'shield time': 3,
                                                'shield time': 3,
'shield_health': 1,
                                                'shield_health': 10,
'num_deaths': 22,
                                                 'num_deaths': 2,
'num_shield': 12}
                                                'num_shield': 1}
```

## Covid

Your team should be ready to work with available members

Automate all the scripts and setup to avoid panic



### Expectation vs Reality



