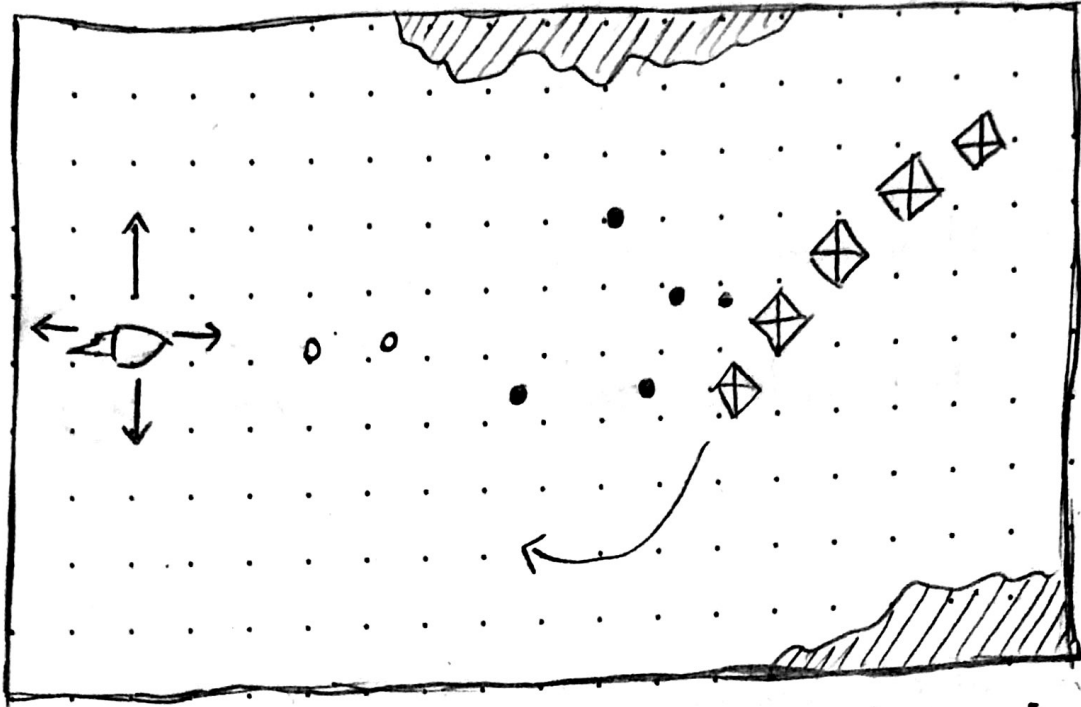# Delta5 Game Design

kill enemies to get points

score 01000

game scrolling continuously ---->

player controlled spacecraft

asteroid obstacle

player bullet

enemy bullet

moving enemies

Goal = To get as high of a score as possible

Options = Slow mode (regular speed)

Fast mode (sped up to get score quickly)

High level APIs

- Easy to use but "dumb"

- Imperfect, to encourage player to create better AI

- Least controls made available to player

Checking:

boolean at Top of Screen   boolean at Bottom of Screen
boolean enemy In Front

boolean asteroid In Front

Actions:
void shoot

void move Up

void move Down

Example AI :

```
if asteroid In Front ():
    move Up ()
```

```
while asteroid In Front () or enemy In Front () :
    if not at Top of Screen () :
        move Up ()
    else :
        move Down ()
```

Low level advanced API

- Allows for more fine tuned controls

Checking:

int getPosition

int [] get All Enemy Positions

int get Nearest Enemy Position

int get Nearest Bullet Position

int get Nearest Bullet Speed

Actions :

void shoot ()