

# **Design Doc**

## **Initial Design**

**Objective:** The objective of this assignment is to create the Game of Life. o

### **Deliverables:**

- Makefile
- README.md
- DESIGN.pdf
- WRITEUP.pdf
- Universe.c
- universe.h
- Life.c

### **Universe.c**

Universe \*uv\_create(uint32\_t rows, uint32\_t cols, bool toroidal)

- For this function i will have to create a universe using for loop and the predefined struct variables. I will also use malloc

void uv\_delete(Universe \*u)

- This function will delete by using free function

uint32\_t uv\_rows(Universe \*u)

- This will return the rows

uint32\_t uv\_cols(Universe \*u)

- This will return the cols

void uv\_live\_cell(Universe \*u, uint32\_t r, uint32\_t c)

- Incomplete

bool uv\_get\_cell(Universe \*u, uint32\_t r, uint32\_t c)

- Will get the cells

bool uv\_populate(Universe \*u, FILE \*infile)

- This will populate the universe

### **Life.c**

This file will run the game based on the three rules.