### **User Story**

animated - 1.
Dynamic pixel
locomotion, 2.
follow defined
ruleset, fast state
transition
performance

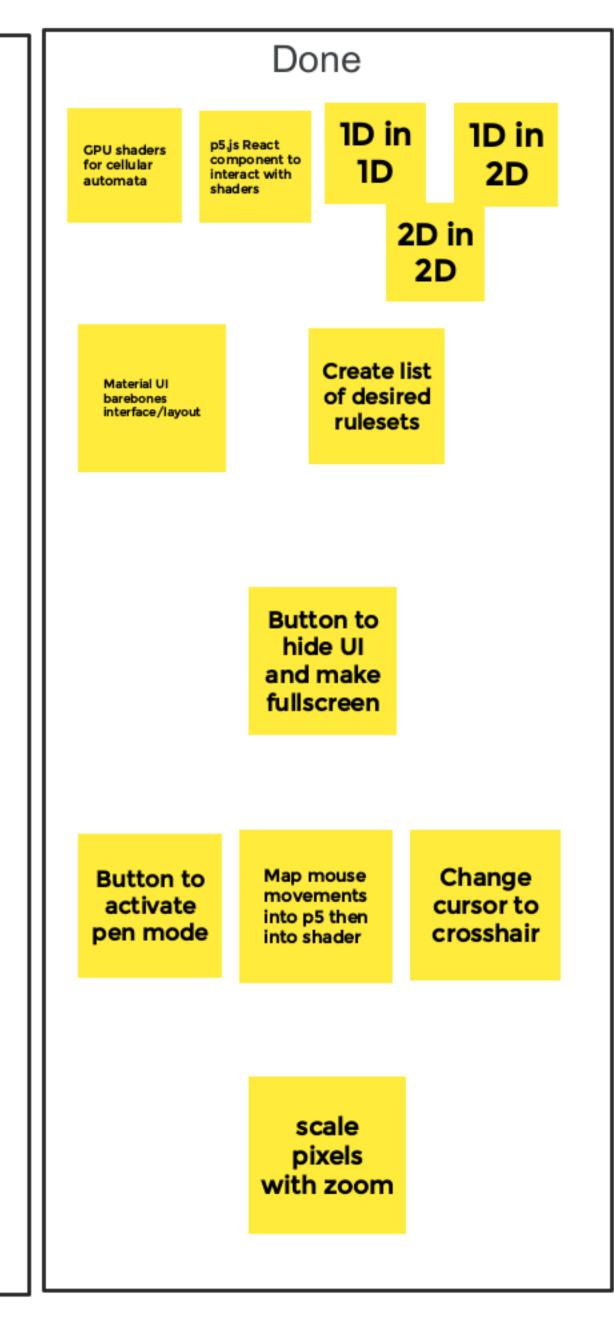
premade - 1. A couple of interesting rules, 2. Implemented as shaders, 3. Selectable in side menu

Fullscreen - 1.
Button to
fullscreen, 2.
Icon changes
state of
window

Pen - 1. Pixel perfect drawing, 2. Square brush type, 3. Change brush size, 4. Cant draw when menu dicked

Zoom - 1. Scale pixel size,

# To do



In Progress

# User Story

Pause - 1. Button to stop animation and state transition, 2. Toggle state of play, 3. Change icon accordingly

Shader lang - 1. IDE to develop code, 2. Compile to GLSL code, 3. Animate CA with Rule from GLSL code,

Welcome/About - 1. Loading HTML page at root url, 2. Describe the platform

Save - 1. Upload state and properties to server, 2. Retrieve state and props from server

### To do

## In Progress

### Done

Pause CA animation

Change state while paused

Continue CA animation from current state

Python prototype

Integrate prototype in p5

Write shaderlang in JS

Integrate shaderlang in right-hand tab

Logo

Description of what Cellular Automata is

Navigation to simulation canvas

Host database Build database Export data from p5 Send data through server to database

### **User Story**

Account - 1. Secure, 2. Register new account, 3. Hashed passwords, 4. Json web token

Color Picker - 1. Interfaces with shader lang state/IDE, 2. Usable by pen, 3. Maintain color

Properties\_UI 1. Sliders to
change
properties of
the viewer

Community
Post - 1. A list
of CA posts
with titles and
creators, 2.
Sort By filter,

Error Message
- 1. Warning
when IDE
code doesn't
compile, 2.
Red color

To do

## In Progress

Create
account La
db for

Login db function Security tokens / session IDs

Done



API schema

API routing to db



Integrate colors in React states

Maintain colors/states with graphical representation

Input slider for properties values

UI component for shaderlang parameters Integrate selected parameters in shaderlang & p5

Basic function of listview

Will follow social media aesthetic with: post name, creator name, link to CA

Snackbar to show Alert message

Export as component

**User Story** To do Done In Progress On click, routes to Able to click Locally store the current canvas page on own saved with chosen CA CAs and post id being restore it Post to Canvas - 1. viewed Link that loads posts into canvas from community page Saved Posts -1. List all the posts the user has created Delete button for a user's Post Delete - 1. Frontend-backend API posts **Button to** requester delete function route remove post from server Delete On click, removes post from shown list **Export Button** - 1. Button to get PNG of state