

Sketchy

Design requirements

Our application will be designed for two types of users - hosts, who run a room and view all the sketches made in real time, and sketchers, who make sketches on their devices.

Host	Sketcher
<ul style="list-style-type: none">• Creates a room and views the sketches made in the room in real time.• Has the option to create a public or private room• Can sort sketches by last modified, date added, by color, or randomly, submitted or ongoing• Can select the amount of sketches in view mode e.g. 2X2 or 4X4 or 1X1 (to view one single sketch)• Since images are all in 4:3 aspect ratio, can view images in grid• Must be on a computer, in order to have the flexibility to simultaneously view and sketch at the same time• Can save all sketches from room as a .zip for future reference.• As soon as the room is fully abandoned, all sketches are gone• Host has the option to make sketchers' responses viewable by all sketchers or not.• Menu option<ul style="list-style-type: none">○ make public○ save sketches○ view sketches○	<ul style="list-style-type: none">• Logs in and has the option to join a public or private room either by selecting the room name or entering the room key into the search bar.• Can draw on mobile using their fingers, or on a desktop using a drawing tablet, mouse, or trackpad on a canvas.• Has a pen tool, eraser, undo + redo, and the option to save the image onto their device as a .jpg• shortcuts supported on desktop - [e.g. ctrl-z for undo]• phone shortcuts - tap to switch between eraser and pen• All images are in a 4:3 aspect ratio of and must be drawn in <i>landscape</i> mode on mobile devices• Submitted sketches will not be editable - but will be available for viewing or reference.• Has the option to view sketches in the room (one at a time)• UI Menu on one side of sketching area will include...<ul style="list-style-type: none">○ Color selection (Color Wheel, alpha)○ Pen (slider)○ Eraser (slider)○ Undo○ Redo• Slide-in hamburger menu includes...<ul style="list-style-type: none">○ Name your current sketch○ Submit your current sketch○ View submitted sketches from session○ View group's sketches○ Save current sketch to device○ Leave room

User Scenario:

Jeff is leading a lecture in menu design for his User Interfaces class. He'd like to be able to see and display designs students are sketching in real time, so he opens a new private Sketchy 'room', distributes the room code, and tells his students to join the room from their mobile devices or laptops. Now in the room, the users can begin sketching from the canvas interface. They have the option to save sketches to their devices, view other sketchers' sketches, name their sketch, and submit sketches to the room. While they work individually, Jeff is able to view all current sketches in real time, and display them to the class from the host interface. He can also contribute his own sketch, if he so chooses. When the activity is finished, Jeff has the option to save all of the sketches, or individual sketches, from the session. He then closes the room, and the session ends with it.

Specifications - Programming Side

- Canvas
- View Sketches
- use sketch.js for canvases and tools
- Images live on server, updated only when a user makes an edit to the sketch
- View requests show image in its current state, updated live as user makes edits
- Use MVC framework to keep images updating in real time

Reach Goals

- Use computer vision to detect shapes
- Insert direct shapes with fill and stroke
- Change canvas color // fill regions
- Users can leave a comment on a sketch, perhaps in the form of likes, dislikes, emoticons.

MOCK-UPS:

opening user page (join room)

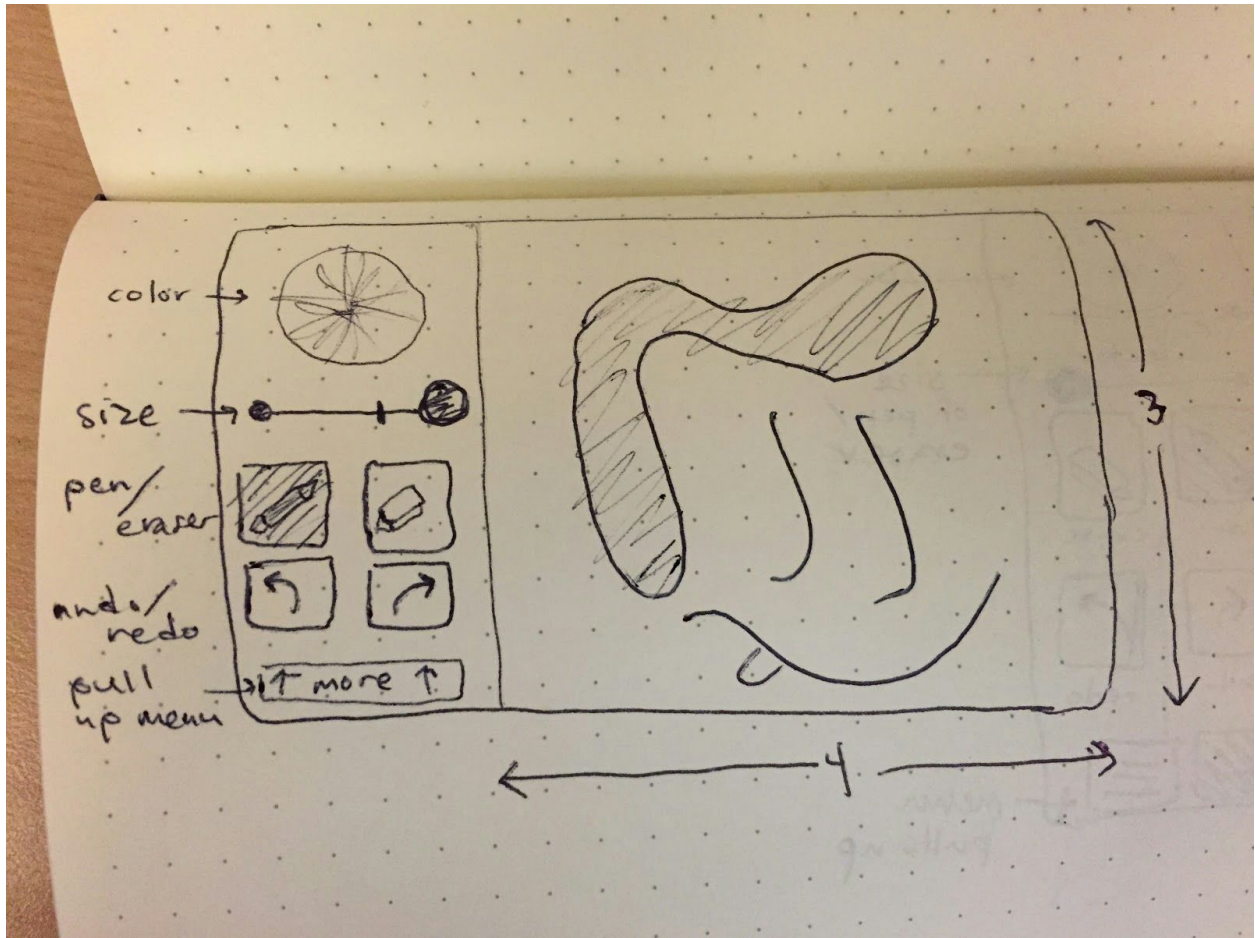
canvas, sidebar with colors and pen/eraser options

- view with slide up menu pulled up

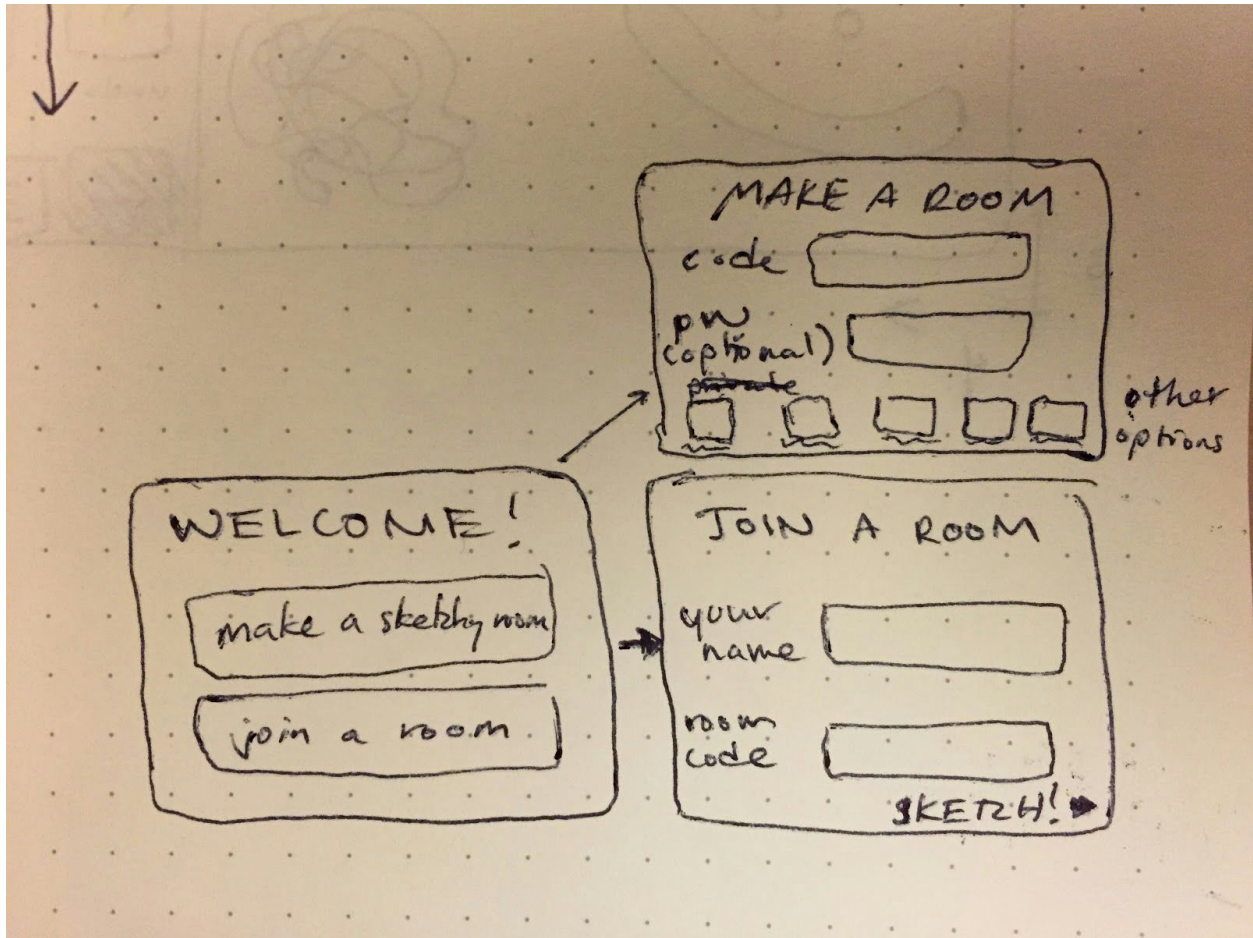
view sketches page

host form (create room)

host interface (drawing, viewing)



Sketcher's Canvas - Mobile Device



Opening menu - Host, Sketcher