Cup 'N Cake
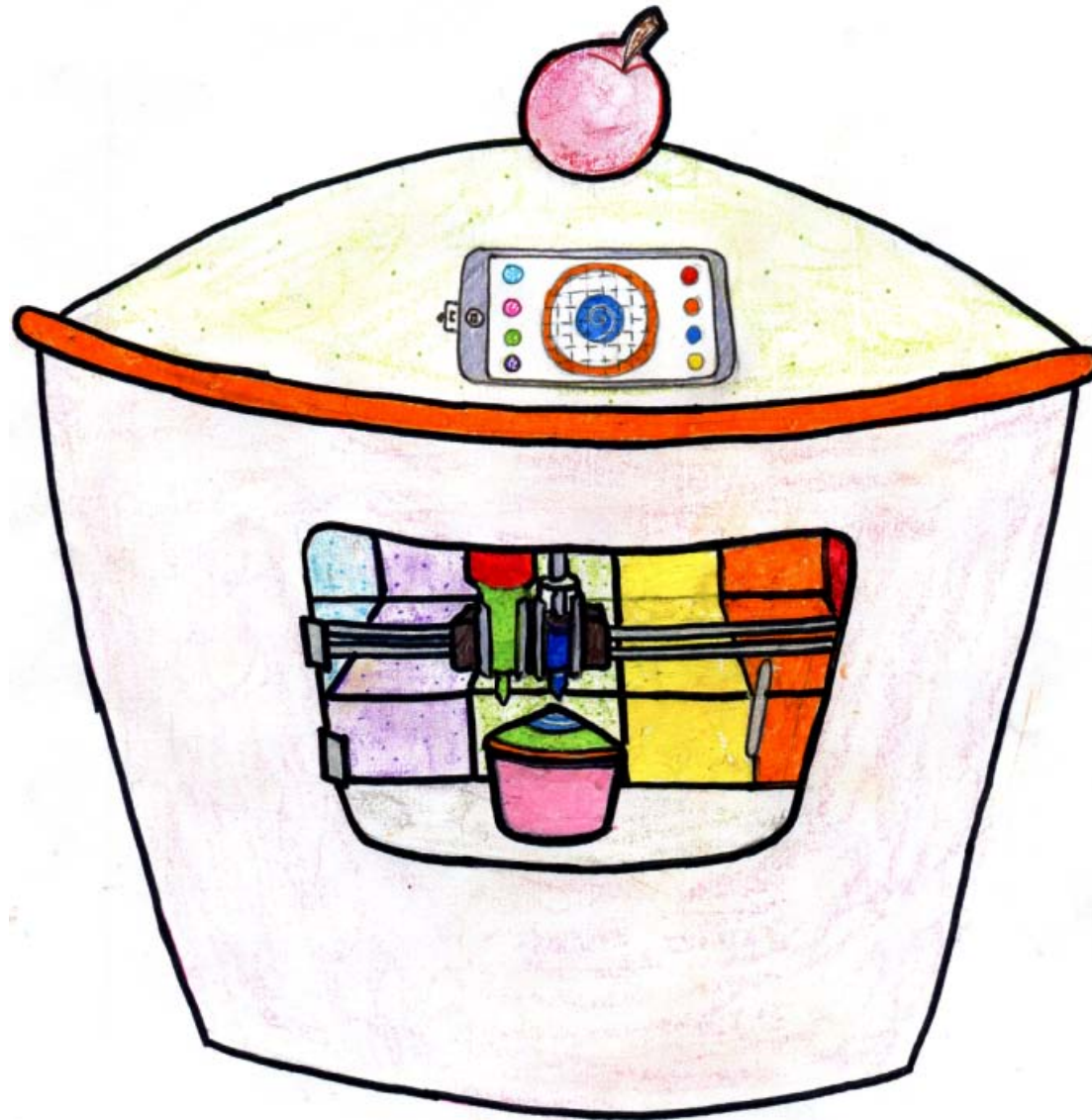
CNC Baked Goods Decorator

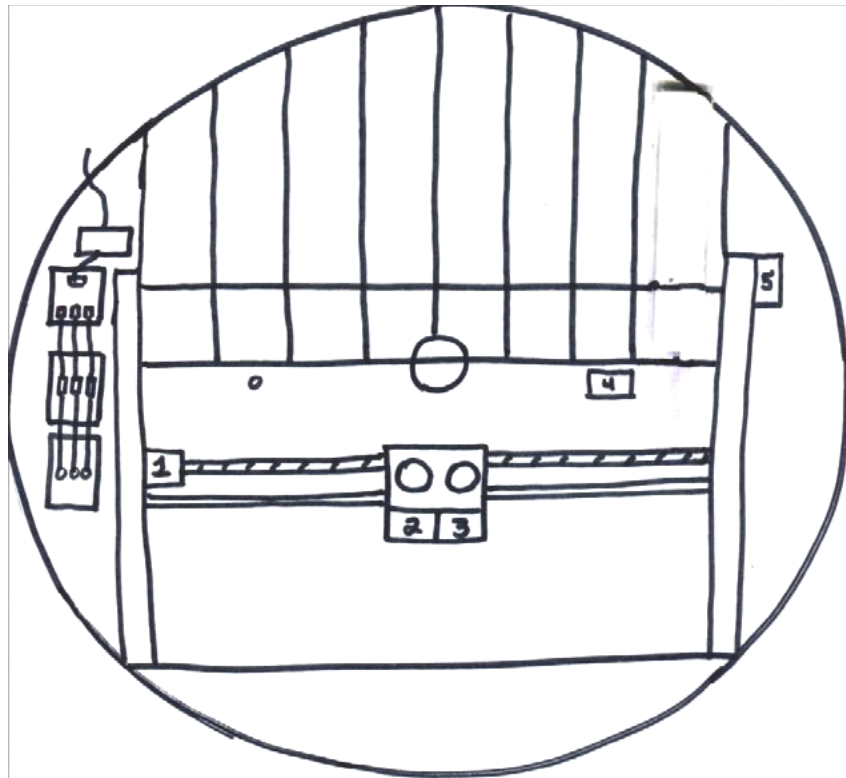Michelle Burroughs, Dan Fourie, Karen Hart, Amber Houghstow, Travis Tucker

Sketch Model Demo

Sketch Model Demo Cont.
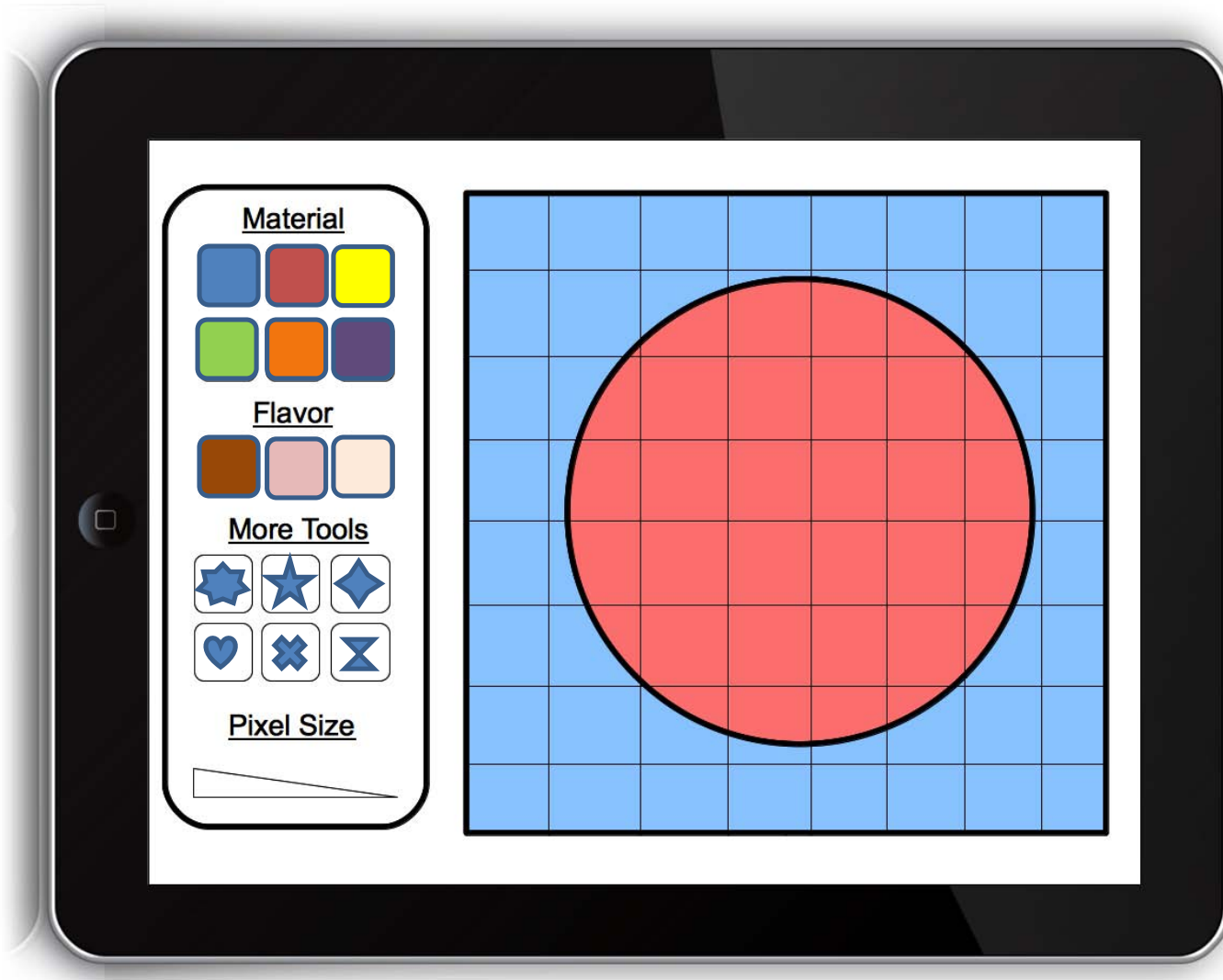

1. MOVES EXTRUDERS LEFT/RIGHT ↔
2. ACTUATES VACUUM FOR SPRINKLE
3. ACTUATES PLUNGER FOR FROSTING
4. ELEVATES TABLE UP/DOWN ↕
5. MOVES EXTRUDERS FRONT/BACK ↕

- 2-axis head controlled by stepper motors
- Multiple hoppers or extruders
- 12" maximum dessert diameter
- Frosting stored at back
- Z-stage for 3D positioning
- Top-mounted camera links edge-finding to UI.
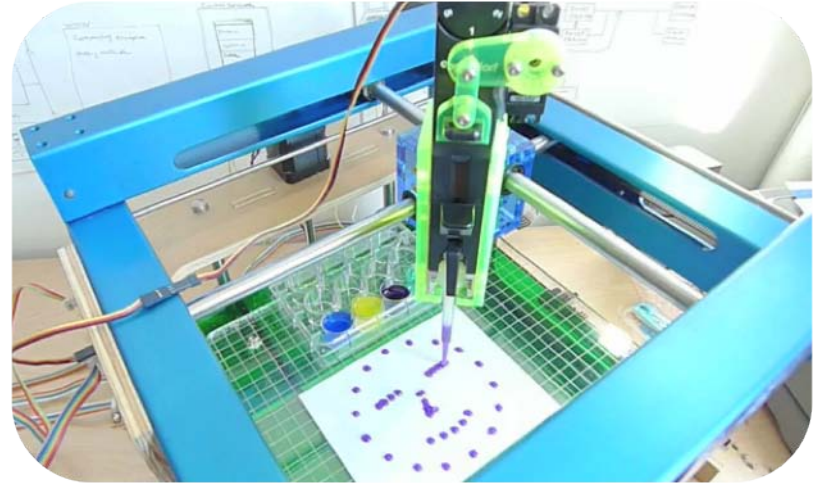
User Interface

Technical

- Resolution: Approx. 1mm
- 3D printing is ubiquitous
    - 5K for commercial desktop 3D printers, 1K for DIY printers
- Many extruder/hopper options
- Open source software:
    - MTM Multifab, Center for Bits and Atoms, MakerBot

Unique Features

Prior Art

- Only one frosting type is used
- Not consumer friendly
- Small
- Hand-made

Cup n' Cake

- Multiple material dispensing
- Easy user interface
- Accommodates as large as 12' by 12' of baked goods

Questions?