Cash Cow Design Document

Project Objective: Our application is an idle-clicker game that builds upon the wallet assignment from ECS189e. We will implement gamification (badges, customization, virtual "currency", rewards/penalties) to educate users on various aspects of personal finance.

Libraries
- **Animations:**
    - Spring (maybe)
    - Hero
- **Parsing:** Japx or SwiftyJSON
- **Authorization:** Simplicity - FB & Google OAuth
- **Linter** - ~~SwiftLint~~
- **Design:** Dynamic Color (?)
- **Date & Time**: SwiftDate (?)
- **UI Components:**
    - **Buttons**
        - EasySocialButton - pretty auth buttons?
        - SSBouncyButton - for our cow clicking
    - **Popups/Notifications**
        - CatAlertController - An easier way to use UIAlertController (for when we do popups for notifications or whatever)
        - CRToast
    - NVActivityIndicatorView
    - JVFloatLabeledTextView
- SDK: Firebase
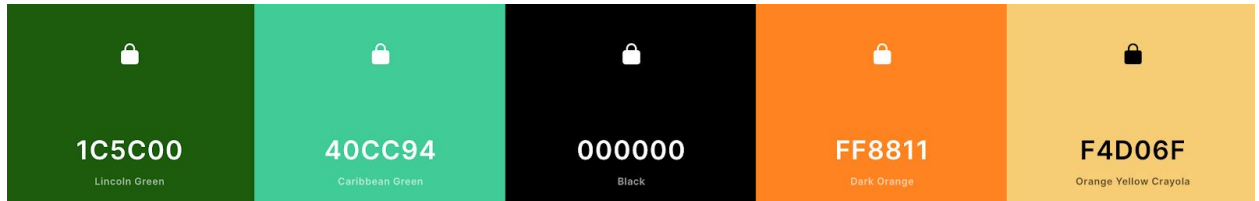   - Auth, Analytics, Database, Storage

ViewControllers
- **Launch:** logo; skip login/signup + verification if user is logged in
- **Login/Signup:** option to login (returning user), signup (new user) with email, Google, or FB
- **Verification:** for new users, verify account
- **Home Menu:** option to start game or logout
- **Clicker:** click to generate income while stamina is not empty; display user stats
- **Settings:** options (just logout until Milestone 2)
- **Upgrades:** TBD (no upgrades until Milestone 2)
- **Profile:** TBD (have basic stats in Clicker until Milestone 2)

Team Roles

- **Angie:** Doc writeups, team scheduling, sound design
- **Bridget:** API's, Firebase, testing + debugging
- **Jarod:** Design, auxiliary support
- **Rachel:** Front-end programming, testing + debugging

Project Schematics

- **Color scheme:**

1C5C00	40CC94	000000	FF8811	F4D06F
Lincoln Green	Caribbean Green	Black	Dark Orange	Orange Yellow Crayola

  - Lincoln Green 1c5c00
  - Caribbean Green 40cc94
  - Dark Orange ff8811
  - Orange Yellow Crayola f4d06f
- **Font:** Proxima Nova
- **Font Sizes:**
  - Small -- 10px
  - Medium -- 20px
  - Large -- 30px
  - XL -- 50px
- **Models:** iPhone SE 2020, iPhone 11

Milestone 1 - (2/22)

- **Setup:** Github repository, design document, Trello board, Balsamiq wireframe
- **View Controllers:** Launch, login/signup, home, clicker
  - Storyboard views created
  - View controller code outlined
- **Next Steps:**
  - Fully functional clicker with income/stamina interaction
  - User authentication completed
  - Storyboard views for Upgrades, Profile, and Settings
  - Brainstorm feasible upgrade options + implementations