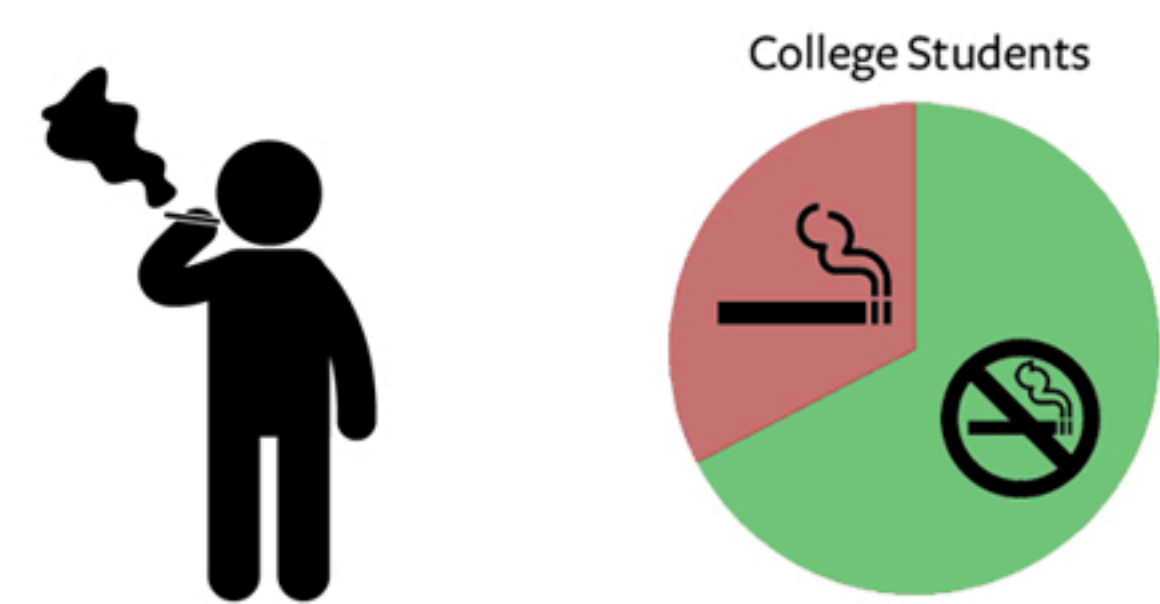


Reducing Smoking Habits

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Team #18

Background

- Smoking is a practice in which a substance is burned and the resulting smoke breathed in to be tasted and absorbed into the bloodstream. (defined by Wikipedia)
- Majority of lifelong smokers begin smoking habits before the age of 24.
- Smoking is a dangerous and unhealthy addiction that 1/3 of college students do.
- College anti-smoking policies and programs seldom reduce smoking among students.



Project Motivation

- Deviate from familiar scare tactics and blatant facts that are hardly effective.
- Utilize research-based motivation and positive reinforcement to support people quitting.

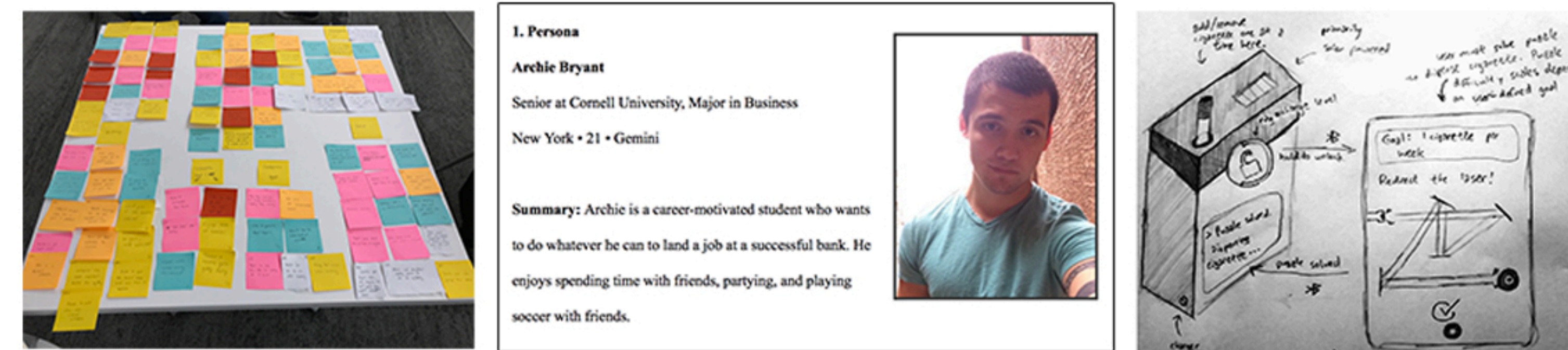


Project Goals

- Discover effective methods for people who wish to quit, reduce, or control smoking habits.
- Encourage users' reduced daily cigarette consumption over time, ideally to help them quit.
- Help users increase mental sharpness and lucidity without relying on cigarettes.

Design Process

Stage 1: Concept



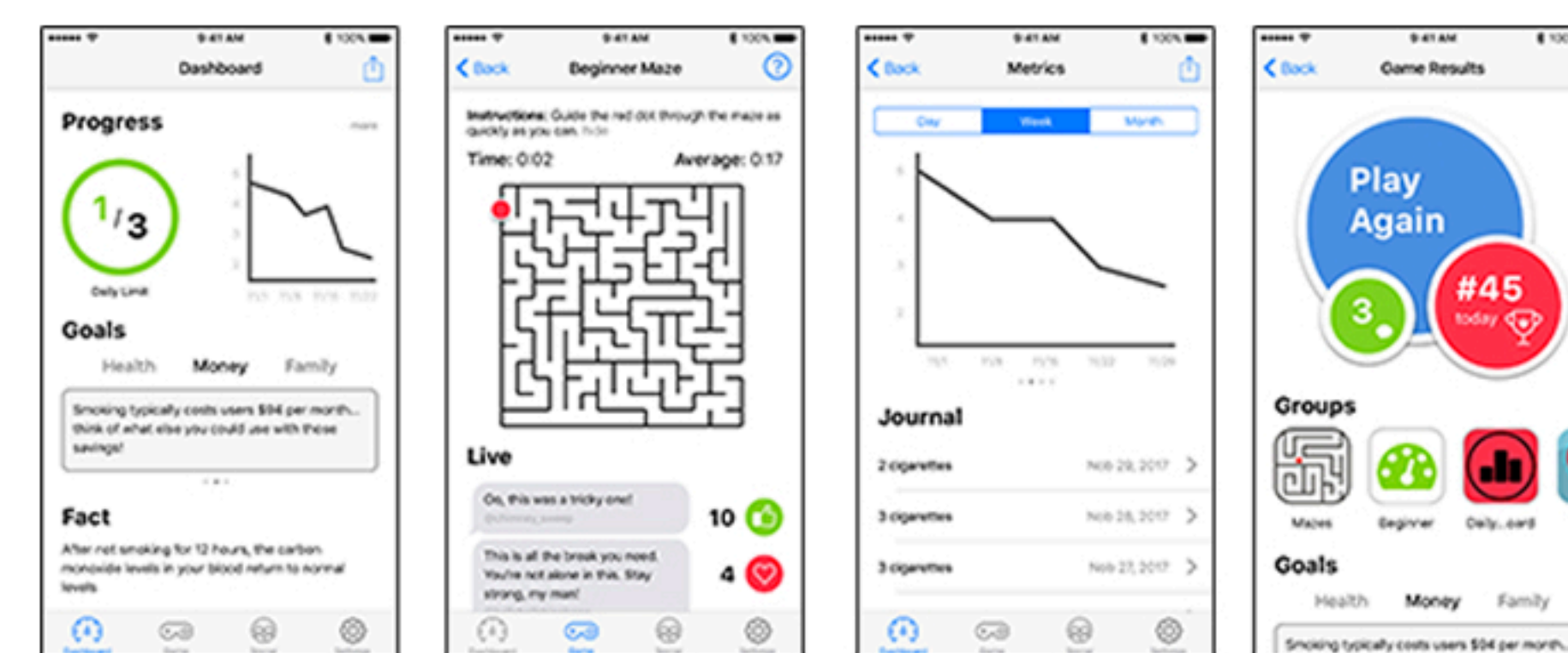
After interviewing people who want to quit their smoking habits, we created a diagram full of information about their lives and personal experience related to our problem. From our affinity diagram, we created a persona which embodied the most significant and relevant data. After ideating dozens of ideas from our findings, we all had variations of a Bluetooth-related accessory, and agreed it was a unique solution to our problem.

Stage 2: Low-Fidelity



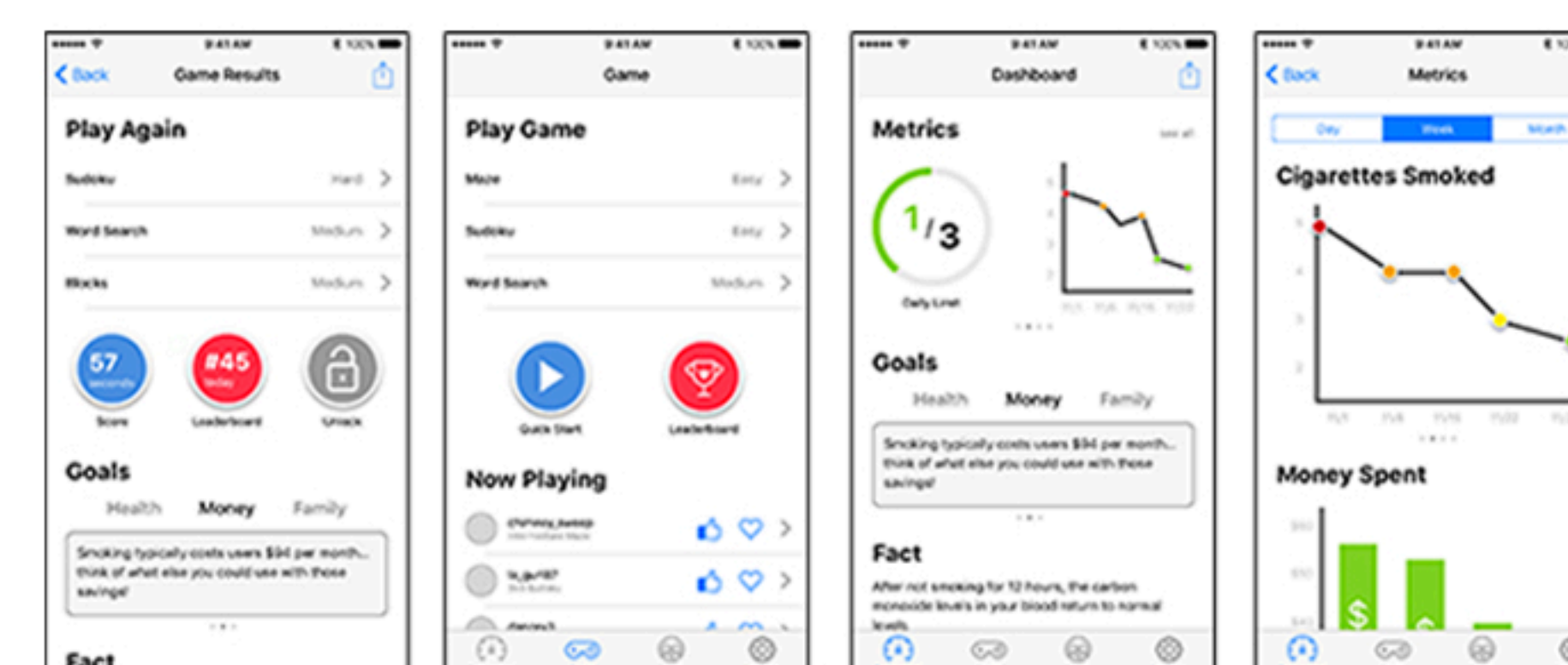
From our sketches, we created a low-fidelity mockup of our design in Balsamiq. We mapped out the basic user flow for our application, which allowed us to start testing the prototype.

Stage 3: High Fidelity



Then, we moved to high fidelity iterations, adding details and fleshing out features. From this, we were able to do more realistic user evaluations with InVision, which allowed us to continue iterating.

Stage 4: User Evaluation and Iteration



Lastly, we ran user evaluations and incorporated feedback to refine our prototype. Changes made include creating a new visual menu and removing social features. Rationale is in Key Findings.

Methodology

Contextual Interview

Six college-age participants were asked to identify their smoking habits and their attempts to reduce smoking. All participants either wished to control their smoking habits, or have already quit. Activity notes were produced, bucketized into categories, and used to inform our persona.

Paper Prototype Evaluation

Six college-age smokers, who didn't participate in the contextual interview, were asked to use the paper prototype for 20-40 min and evaluate its effect on their smoking habits. Tasks include unlocking the cigarette box and testing out the major screens of the app.

Heuristic Evaluation

All six team members operated all the screen of the Invision prototype and cited eight violations of Nelson's heuristics. The combined citations were collated on an Excel spreadsheet with their severity and suggested fixes. Functional duplicates were eliminated.

Usability Testing

A final six college-age participants were asked to complete tasks on the Invision prototype. All users had regular smoking habits during the time of the evaluation. Tasks include: play a game to unlock the pack, check metrics, message a friend after playing a game, check the leader board, and play another game instead of opening pack.

Key Findings and Design Decisions

Finding	Instantiated Feature
Initial Interview (Stage 1-2)	
Wanted to quit or reduce smoking to improve their health.	Displays personal smoking and health stats for tracking and motivation.
Stress was a common trigger.	Game to occupy mind and hands in stress/craving moments.
Negative reinforcement was ineffective.	Motivational quotes and goal-related facts
Support networks were helpful for long-term quitting	Social feature for further support and motivation
Paper Prototype (Stage 2-3)	
Statistics were the most encouraging	Added more statistics
Motivational quotes received mixed reviews	Removed quotes due to varying opinions
Goal-related facts received well	Created a more in-depth stats page
Wanted more social features	Fleshed out social section
Heuristic Evaluation (Stage 3-4)	
Unclear lock-screen notification and irrelevant response options	A more contextual lockscreen push notification
Games do not have explanations	Added instructions for brain games
Social page navigation was clunky, could not get back from certain pages	Improved navigation flow between pages, especially social
Confusing graphics for certain statistics	Added back buttons to pages Simplified the statistics page