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Integrative Project Thesis
Cup of Sugar iPhone Application
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Section 2

Introduction

The Cup of Sugar mobile application utilizes online social networking in order to bring together two friends who have individual ingredients that combine to make a delicious shared meal (figure 1).

figure 1: Cup of Sugar icon

The core focus of this project lies in the desire to re-focus the meaning of eating from singular, ready-made meals and bring back the natural social meal. Carolyn Steel, author of *Hungry City*, explains, "cooking is about much more than chopping up a few vegetables and throwing them in a pan, or putting a ready-made pizza in the microwave" (164). Cooking is central to societal success- without food there can be no life. Cooking isn't a formality, after all, every living space has a kitchen in which people can slice, dice and create their own meals.

"If you had the chance to have dinner with one person, dead or alive, who would you choose to eat with and why?" This age-old question prompts the person answering the question to think about who they admire and what they value in life in order to make their decision. Every person who is asked this question has a different answer, simply because we admire different people and have different appreciations of what is important, interesting and adds value to everyday life.

What currently stops meals from being life-changing experiences is the simple fact that many college students eat meals alone. There is no discussion, no added personal flavor to the dining experience besides you and the food that is right in front of you. The lack of reasons to try new

things, new cuisines, address new topics of discussion are because average college student dining is a lonely event centered around the television/computer, or eaten in silence at the dinner table. The potential for an exchange of information and knowledge cannot happen by eating with yourself.

Goals of Project

I seek to re-establish togetherness around the dining table. A friend is a person one seeks out in life to share knowledge, experience and a relationship with, so breaking home-made bread with them is natural. According to Susan Allport, the author of *The Primal Feast*, "In many cultures, two people do not feel they can talk in a friendly way unless they have eaten together. It is the equivalent of being properly introduced" (181). Though it is not necessary in American culture to be properly introduced to a friend over food, many students share meals together, starting with eating in the dorm dining halls. After moving out of the dormitories into off-campus housing such as apartments and houses, friends still meet together for meals, if time and busy schedules permit. Why not create a fabulous meal together with your own hands and save money? In the words of Carolyn Steel, author of *Hungry City*, "Yet now that we all have kitchens, we are still prepared to pay other people to cook our food- which might make sense for those who can afford to do it occasionally, but for the less well off it makes no sense at all" (164). The kitchen table is a place where families gather to share meals, so for friends it can also provide the same food-sharing experience. When away at school, friends become one's college family.

My project goal is to create a home cooking eating experience that brings friends and acquaintances together over the dinner table. The integration of communication via social media is paramount to this experience, as the dissemination of information is lightning-fast when using the internet as a medium. Whenever college students want to get together and catch up with a

friend, they typically meet together over a meal, whether it is lunch, dinner, a coffee break, and everything in-between, since everyone has to eat. This mobile application will enable students to quickly enter recipes in advance of when they are going to cook and allow them to communicate with their network of friends and acquaintances to locate missing ingredients. My project seeks to eliminate wasted time, foster togetherness around the dinner table, make food life less stressful, and strengthen interpersonal relationships.

Creative Work

Materials and Processes

Graphic design, photography and interaction design principles were used in order to create this prototype of a mobile application. My process began with the creation of a singular mind map centered around the word "food" (figure 2). Words like 'photography', 'cooking', 'life', and 'culture' each had a visual relationship with the main idea, doing a project
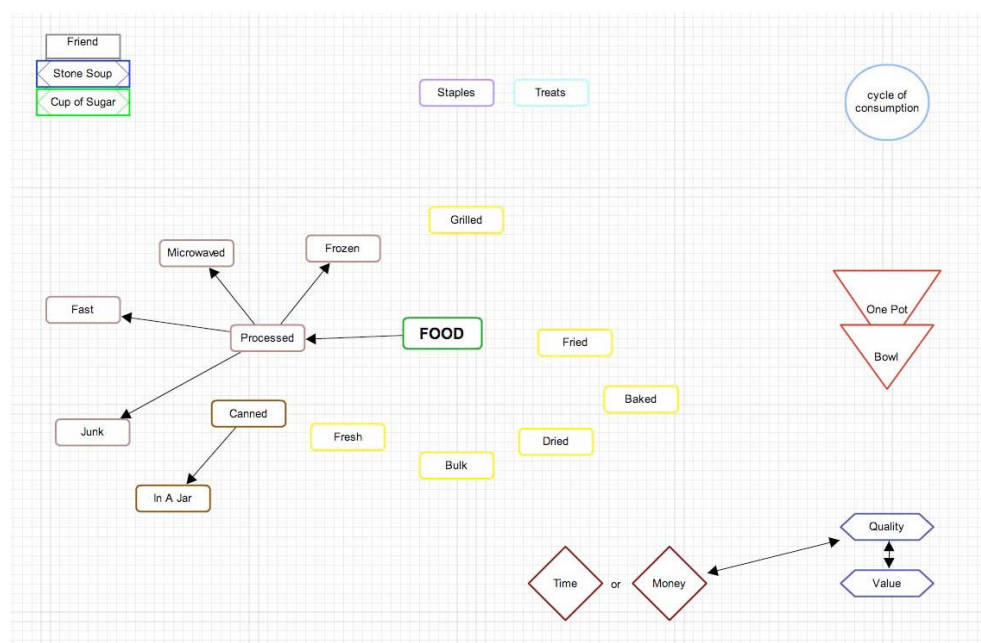
figure 2: Third iteration of mind map

relating to food. From this first mind map, I realized I had many unanswered questions about how other college students view food, cooking and eating. I created a survey and sent it to friends and colleagues, asking them what meals they cook frequently, what dietary restrictions

they have and how often they eat at home, among other things. The results I received were quite

interesting, as I tallied and categorized the results down to the ingredients from the frequently

cooked meals in order to get insight into what other students have on-hand in their kitchens.

figure 3: Mapping on studio wall

From these results, I made graphic displays of the information I collected and used it to start creating a visual user interface map on my studio wall, displaying each step of the application, what each screen has on it and what choices can be made (figure 3). Essentially, it looks like a large puzzle of post-it notes, but this process has made me think, arrange, evaluate, re-arrange and re-evaluate the information on the wall countless times. Deciding how much information to include and what to exclude is easier with this visual display.
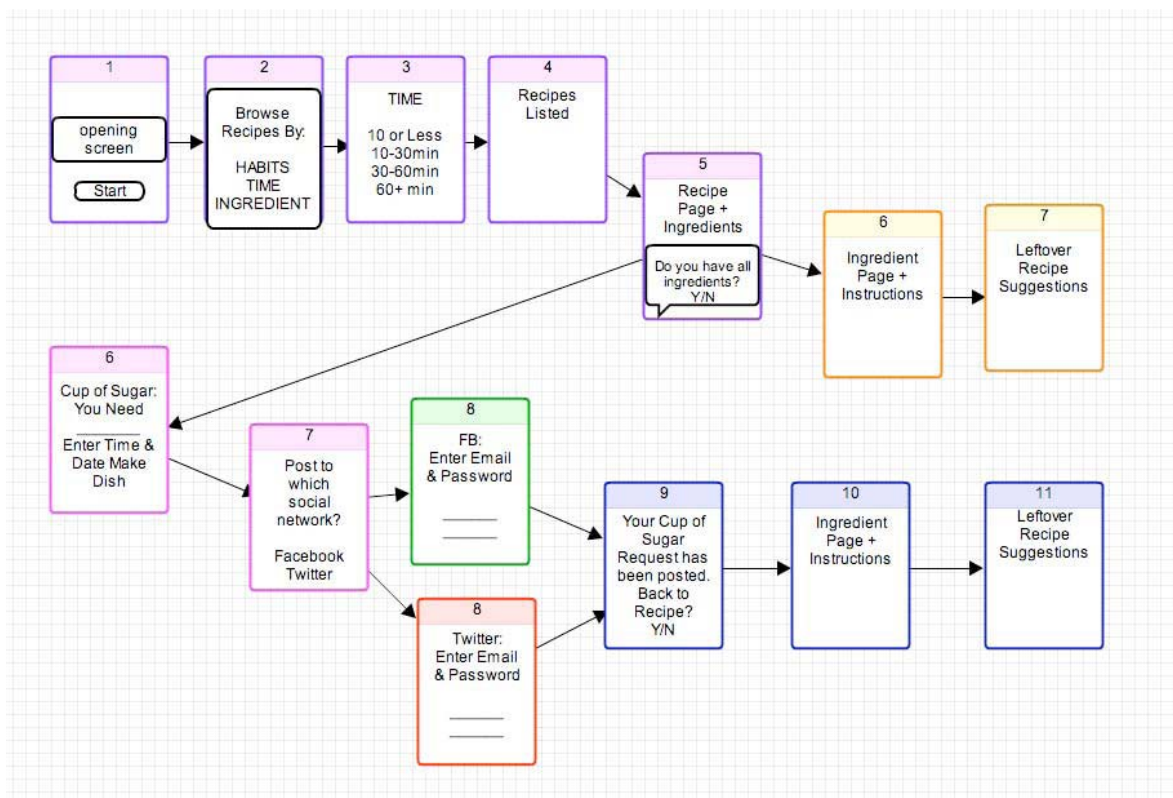

figure 4: Early wireframing of application

Creating wireframes (design outline for every screen with the necessary functions listed) and

exploring color options and styles for the design of the application took a large amount of work

and valuable time, every small detail needs to exist for a reason- including a meaningless

function in the design of the application only hinders the ability for the user to understand how to

use the application and integrate it within their lifestyle (figure 4).

The medium through which the project exists is in a digital format geared towards millennials-

mobile applications. This project will be realized and presented to the target user in the form of

an iPhone application pitch. Due to the timeline constraints of IP, it was not possible to create a

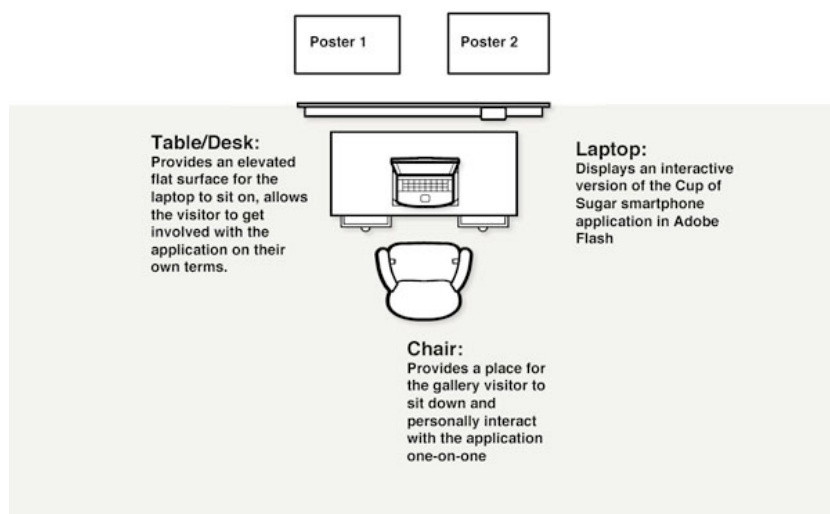complete, functional working application by April. However, I showcased my work for the year

by designing the look and functionality of the application in Adobe Photoshop CS3 and made it an interactive experience by importing it into the program Adobe Flash and programmed it using the coding language ActionScript3. At the IP show, it was displayed on a computer and the viewer interacted with it using

Work: Ann Arbor Display of "Cup of Sugar" Smartphone Application

Poster 1   Poster 2

Table/Desk:
Provides an elevated flat surface for the laptop to sit on, allows the visitor to get involved with the application on their own terms.

Laptop:
Displays an interactive version of the Cup of Sugar smartphone application in Adobe Flash

Chair:
Provides a place for the gallery visitor to sit down and personally interact with the application one-on-one

figure 5: IP display setup

the track pad on the MacBook laptop computer (figure 5).

Contextual Discussion

Cultural Background

The current state of food in the United States for college students revolves around singular, solitary ready-meals and restaurant fare. According to Carolyn Steel, author of *Hungry City*, "Ready meals have become, as Tony Blair might have put it, the food of the people; not haute cuisine, perhaps, but fancier food than any previous generation ever dreamed of eating regularly— let alone in the comfort of their own homes" (159). Though Steele's book focuses on Great Britain, American culture shows the same symptoms. Our culture has gone from being one of nightly family dinners to one where family members eat at different times, perhaps never together. This change has affected American college students in negative ways.

According to the Center for Disease Control, the Body Mass Index of children and adolescents aged 6-11 from the 1960s to 2008 increased from 4.6% to 18.1% (figure 6). This increase in obesity has roots in poor eating habits and a lack of physical exercise, which

Table 1. Prevalence of obesity among U.S. children and adolescents aged 2-19, for selected years 1963-1965 through 2007-2008

Age (in years)[1]	NHANES 1963-1965 1966-1970[2]	NHANES 1971-1974	NHANES 1976-1980	NHANES 1988-1994	NHANES 1999-2000	NHANES 2001-2002	NHANES 2003-2004	NHANES 2005-2006	NHANES 2007-2008
Total	(3)	5.0	5.5	10.0	13.9	15.4	17.1	15.5	16.9
2-5	(3)	5.0	5.0	7.2	10.3	10.6	13.9	11.0	10.4
6-11	4.2	4.0	6.5	11.3	15.1	16.3	18.8	15.1	19.6
12-19	4.6	6.1	5.0	10.5	14.8	16.7	17.4	17.8	18.1

[1] Excludes pregnant women starting with 1971-1974. Pregnancy status not available for 1963-1965 and 1966-1970.

[2] Data for 1963-1965 are for children aged 6-11; data for 1966-1970 are for adolescents aged 12-17, not 12-19 years.

[3] Children aged 2-5 were not included in the surveys undertaken in the 1960s.

NOTE: Obesity defined as body mass index (BMI) greater than or equal to sex- and age-specific 95th percentile from the 2000 CDC Growth Charts.

figure 6: Prevalence of obesity in adolescents as they enter college

continues when the teenager enters college.

Dormitory cafeterias provide an unrestricted buffet of every food category, and when students move off-campus into apartments or houses and realize they don't know how to cook, resorting to fast restaurant food is the quick, easy, popular option. Though more expensive than cooking at home, fast food requires no personal food preparation and has little cleanup associated with it.

There are no pots, pans or dirty utensils as everything is disposable.

The Slow Food Movement wishes to alter this movement of food source. Created in Italy when McDonalds restaurants began appearing and local trattorias were disappearing, the Slow Food Movement keeps food and the importance of enjoying the eating experience as its paramount focus. The Slow Food Movement's theory and manifesto were an inspiration for the creation of my application and the stress on cooking fresh food that's as delightful for the palate as it is an enjoyable experience. Carlo Petrini began the Slow Food Movement and these are his words describing what Slow Food truly means:

> If fast food means uniformity, Slow Food sets out to save and resuscitate individual gastronomic legacies everywhere; if haste threatens the enjoyment of tranquil sensory pleasure, slowness is an antidote to hurry and the gulping down f nourishment; if the new ways of absorbing nutrition create stereotypes that trample local cultures, Slow Food urges people to recover the memory of regional gastronomic practices. If hamburgers are being consumed mechanically and giving the same stimulus again and again to the sense organs of the young, then we have to undertake a campaign of permanent education of the taste buds; if the places in which fast food is eaten are aseptic and nondescript, let's rediscover the warmth of a traditional osteria, the fascination of a historical cafe, the liveliness of places where food making is still a craft; if the handling down of knowledge about material culture from generation to generation seems about to cease as lifestyles and eating habits become industrialized, then let a new international movement keep the knowledge alive and tell people where to go to find it (Petrini 18).

Historical Background

The research I've done on feasting and the origins of people sharing meals together has shaped my project from the beginning of my process in September 2010. We all eat food, and American society shapes food to be a social experience, so naturally, I was curious as to where this all historically and biologically began. The research I conducted proved that feasting is an integral part of human behavior. "Most animals feed and forage for themselves, but humans share food every day. Sharing food is an integral part of our relationship with others. It is part of almost

every human gathering, tragic or triumphant" (Allport 181). Since the beginning of time, humans

gathered together to break bread and share meals with each other. Without food, there is no life.

Though the twenty-first century is upon us, human biology dictates that we still need to eat daily.

"We are omnivores, which means that the ritual sharing of food goes deep into our past. Our

hunter-gatherer forebears had to find ways of distributing the spoils of the hunt equitably among

themselves, and the fellowship of those far-distant meals resonates with us still" (Steel 211).

From the Last Supper to the Pilgrims' first 'Thanksgiving', friends have shared food in large

quantities. There's another connection between food and friends, in the form of love. "We

always heard that it was love, but food makes love possible", as anthropologist Colin Turnbull

reveals (Allport 54). Bonding with another person can come about through food, the taste

connections and sensations that come with edible treats and sustenance carries through to

personal relationships.

The creation of cell phones is relatively recent in the United States compared to our nation's

relationship with food. The idea of communication via cellular devices dates back to the 1940s,

but the first cell phone was created in 1973. Smartphones have been around just since the 1990s.

Mobile phone applications were built into the first smartphones and only recently have cellular

companies opened their application store to outside programmers. Currently, iPhone OS and

Android OS dominate the smartphone market. As applications relate to this project, the number

of food-related iPhone applications is high, though only three on the market, as of April 17,

2011, target college students. These two iPhone applications are 'Student Grub',

'Recipes4us.co.uk' and 'Cookbook for Students' which are recipe listings. The Cup of Sugar

application is completely different; it's not a recipe database, which sets it apart from the other three existing applications currently on the market. It is an application that utilizes your social network to locate ingredients you need to cook your meal.

Application

The finished prototype is a designed application, created in Adobe Photoshop and imported in

figure 7: Recipe Entry

Adobe Flash to make it an interactive experience. When you click on the application icon on the home page, the first screen it takes you to is the Recipe Entry page (figure 7). The prompt inquires as to what recipe you wish to make. The user types the recipe on the keypad, and presses the "next" button at the top right corner of the screen.

The next screen on the application is the "Let's Find Them" page, for missing ingredients. Once
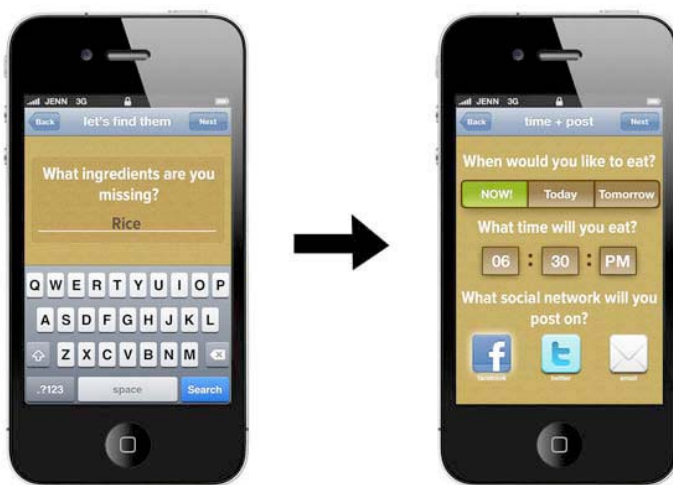

figure 8: Missing Ingredients

again, the user types on the keypad to write in the ingredients he or she needs, then clicks the "next" button (figure 8).

The third screen is the "Time + Post" page (figure 9). There are three prompts on this page for the user to

answer. The first is "When would you like to eat?" and the user has three choices. The user can select now, today or tomorrow as when they want to eat. Today and tomorrow are self-

explanatory, but now is the choice for when people want to eat immediately.

The second prompt is "What time will you eat?" and the user fills in the hour and minutes with the numerical keypad and AM or PM with the dropdown choice. The third prompt on the screen asks, "What social network will you post on?" The user has three options:

figure 9: Time + Post

Facebook, Twitter or to send a message by e-mail. Dependent on the user's choice here, the next screen will be one of these three choices. For example, the application will bring up Facebook when selected. It will construct a Facebook status for the choice you made on the "Time + Post"

screen. The user will submit their new Facebook status to selected friends. After the Cup of Sugar post is sent online, an alert comes up, asking if you want to post your Cup of Sugar message to another social network (figure 10).

figure 10: Facebook & Share Alert

Conclusion

College students stuck in their kitchens wanting to cook but missing ingredients will download and use the Cup of Sugar application. Whether the busiest student is missing rice for their chicken dinner, hamburger buns for a barbeque dinner, or lettuce for their salad at lunch, the Cup of Sugar application will help them connect with a friend that has their missing ingredient. When more than one ingredient is missing, the user can connect with multiple friends, have them bring their ingredients over, and enjoy the meal as a group.

Beyond the scope of IP, I would like to market and hopefully bring this application to life in the form of an actual mobile app for sale on a device's app store. Establishing a marketing plan for pushing this idea further and working with a small team or another company to create this product would be a dream come true. I want to see the idea of Cup of Sugar expand and be a useful tool in the kitchens of college students.

Bibliography

Allport, Susan. <u>The Primal Feast: Food, Sex, Foraging, And Love.</u> New York: Harmony Books, 2000.

Ogden Ph.D., Cynthia. "Table 1" *http://www.cdc.gov/nchs/data/hestat/obesity_child_07_08.htm* . Center for Disease Control, 4 June 2010.

Counihan, Carole. <u>Food And Culture: a Reader.</u> 2nd ed. New York: Routledge, 2008.

Etkin, Nina L. <u>Foods of Association: Biocultural Perspectives On Foods And Beverages That Mediate Sociability.</u> Tucson: University of Arizona Press, 2009.

Halliday, Stephen. <u>Our Troubles With Food: Fears, Fads And Fallacies.</u> Stroud: History Press, 2009

Jones, Martin. <u>Feast: Why Humans Share Food.</u> Oxford: Oxford University Press, 2007.

Petrini, Carlo. <u>Slow Food: the Case for Taste.</u> New York: Columbia University Press, 2003.

Moggridge, Bill. <u>Designing Interactions.</u> Cambridge, Mass.: MIT Press, 2007.

Saffer, Dan. <u>Designing for Interaction: Creating Smart Applications And Clever Devices.</u> Berkeley CA: New Riders , 2007.

Steel, Carolyn. <u>Hungry City: How Food Shapes Our Lives.</u> London: Chatto & Windus, 2008.