



UX Design Portfolio 2011 - 2012

Megha Sandesh



Case Studies



Overhauling a Restaurant's Website



Architecting a Fitness Motivation system



3D Interaction Design Ideation to Implementation



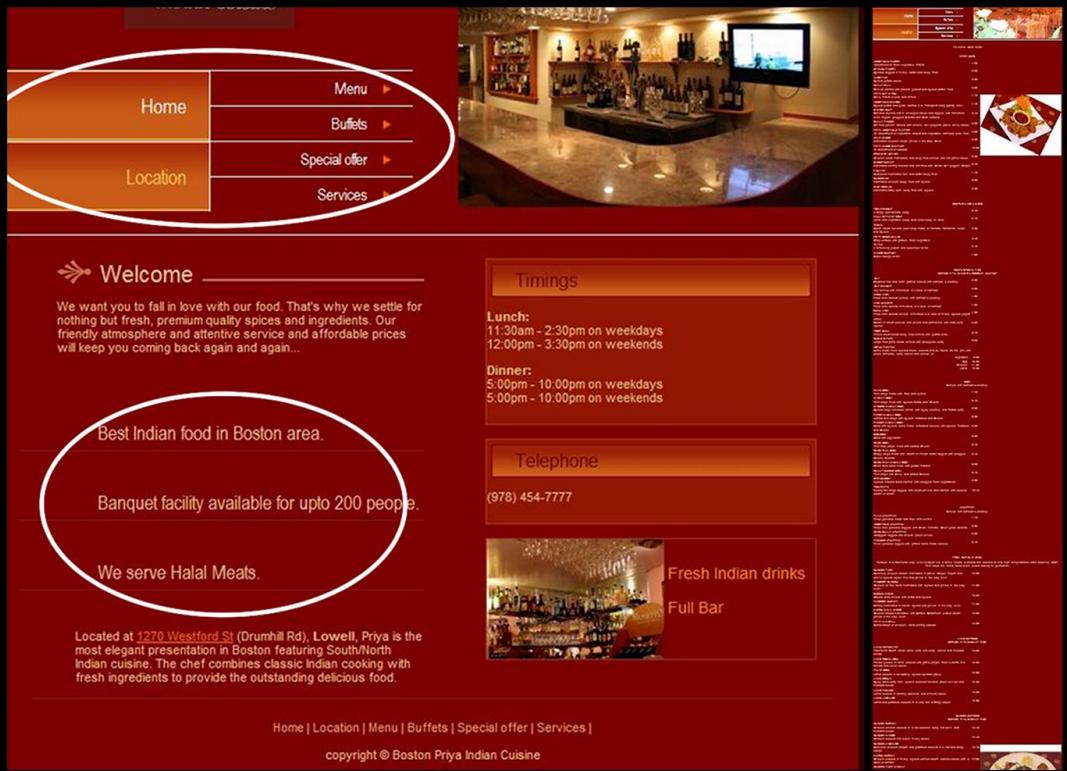
Beautiful Data Space, Time and Structure

Overhauling a Restaurant's Website

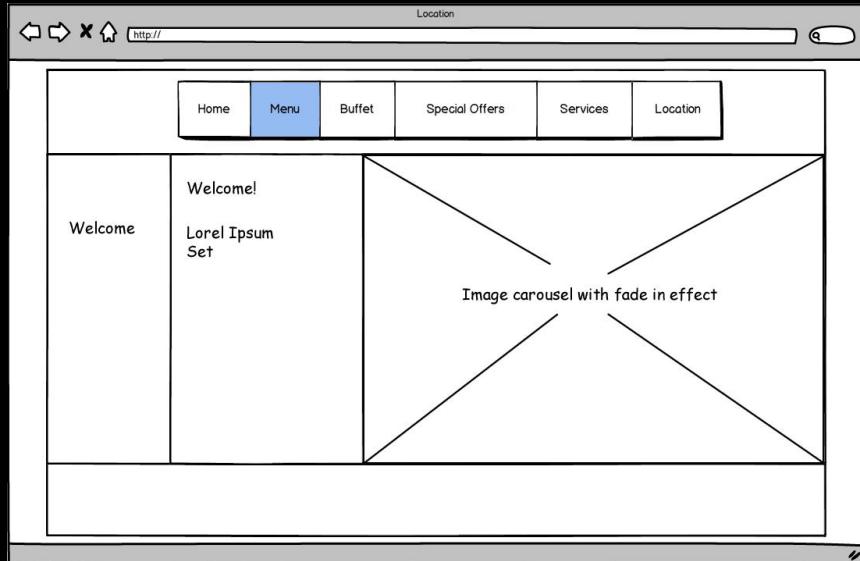
A restaurant's owner wanted me to redesign the existing website since it was out of date and rather hastily done. Straight away, one could tell there were quite a few things that needed fixing.

The navigation bar has 'Location' as a big button for no apparent reason.

Then there was the interminably long menu page...



The Drawing Board



It was obvious that a complete redesign was needed – so I started off with low fidelity prototypes using pen and paper. Later, they were reproduced in Balsamiq

The mockup for the homepage shows the basic layout for the website. Placing the content in the middle panel ensures that the intended areas have maximum visibility. The placing of the navigation bar ensures quick access.

The Experience



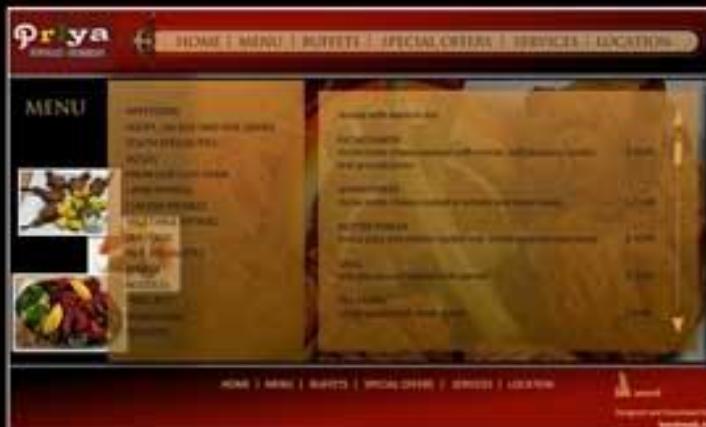
A clean navigation system

Revamped homepage

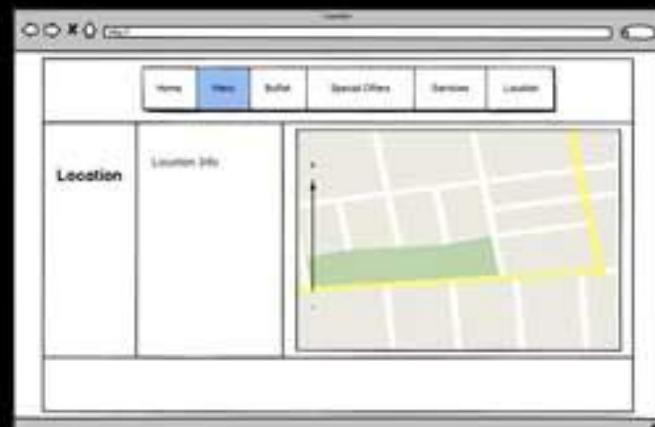
Interactive location

Rich Media Support

Extensible Infrastructure



Menu page mockup and final page

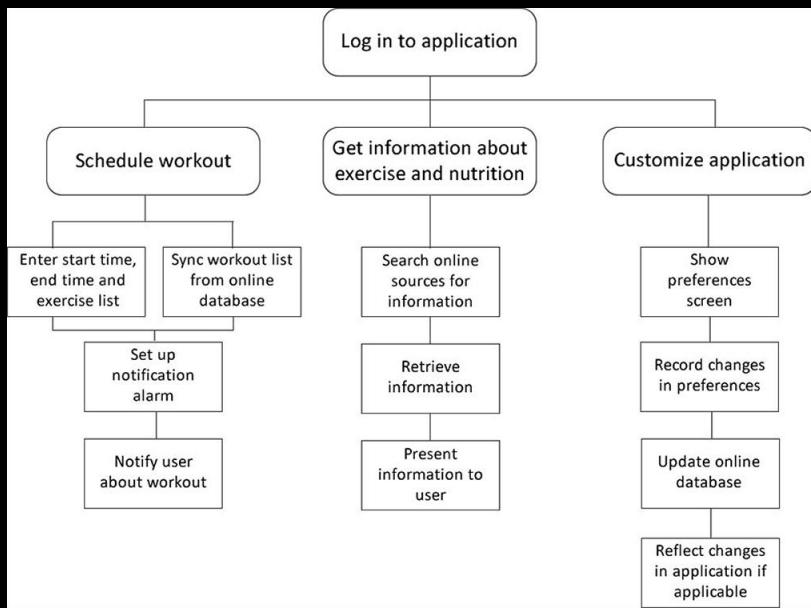


Location page mockup and final page

Architecting a Fitness Motivation System

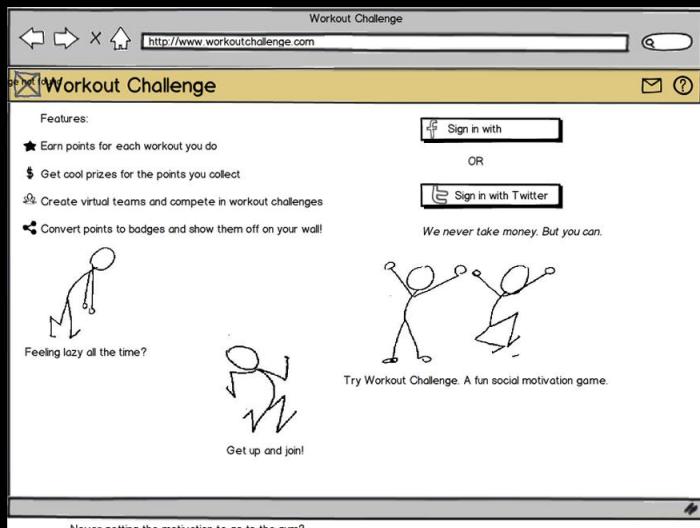
As part of my coursework in Human-Computer Interaction, I worked with a team of 4 people to conceptualize and build an application which helps people maintain a better fitness regimen..

Hierarchical Task Analysis (HTA)



After conducting an initial survey of what people in the aged 18-35 years old (the target group for the system) thought was most important, it was found that motivation between workouts and a way to work out with friends were most important

Prototypes - Web App, iPhone and Voice Driven Interfaces



Start page

The screenshot shows the "Workout Challenge" web application's home or profile page. At the top, there's a navigation bar with icons for back, forward, and search. Below it, the title "Workout Challenge" is displayed with a small icon. To the right of the title are links for "\$", "See more...", and "Add". On the left, there's a large cartoon character of a person with arms raised. Below the character are five yellow stars with the text "Level 7 (2500 / 3000 points)" and a "Upload to Facebook" button. To the right of the character is a section titled "Badges" with two shield icons. Further right is a table titled "Workouts" showing a list of exercises: CRC (Soccer), PS3 Move (Gladiator), and Zumba. To the right of the table is a section titled "Standings" showing a list of users with their names, points, and badges. The table has columns for Rank, Name, Points, and Badges.

Rank	Name	Points	Badges
1	Cool dude	100000	shield
2	Almost there	90000	
3	Daily worker	85000	
-			
1450			
1451	My neighbor	1500	
1452	Me	1437	
	Loser	1400	

Home/Profile Page

Workout Challenge

Edit Profile

Sync data from Zumba

Display Name: []

Date of Birth: []

Weight: [] kg lbs

Sex: Male Female

Avatar: Upload file

Thumbnail:

Save Cancel

My Name:

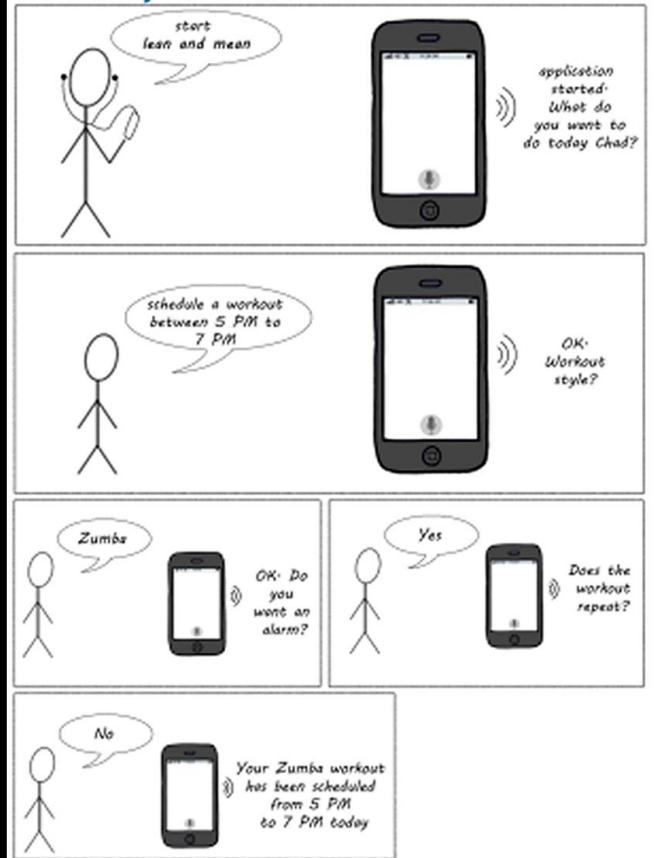
Level 7 (2500 / 3000)

1452

See more...

Name	Points	Badges
Troy	100000	85000
Chad	90000	85000
Mike	1500	1437
Loser	1400	1400

Scheduling a workout



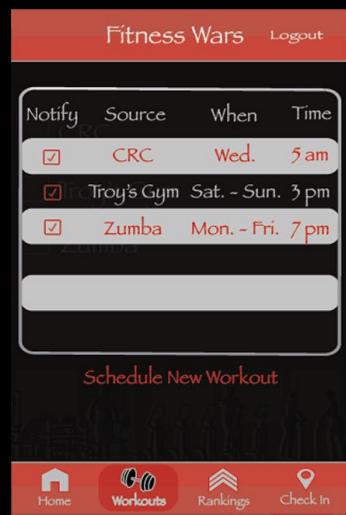
Editing Profile and Attributes



Entering a challenge

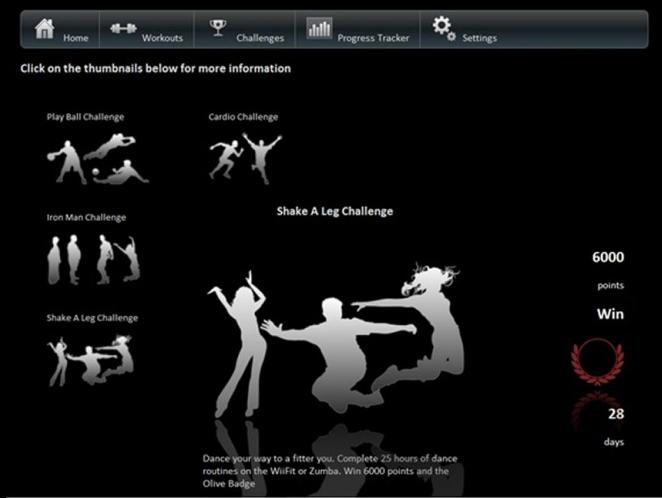


Voice Driven Interface



Mobile App Interface

The Results



Challenge Page



Badges Page



Pilot Study

6 out of 7 participants were excited by the app and ready to recommend it

Scheduling workouts is still the most tedious job which needs rework

The mobile app is ideal for everyday use, while the web app is to be used periodically like once a week to manage the whole regimen

Integration of mobile app and web app was the most important feature



Mobile App

3D Interaction Design: Ideation to Implementation

How do you embed computing into the real world but make it invisible?

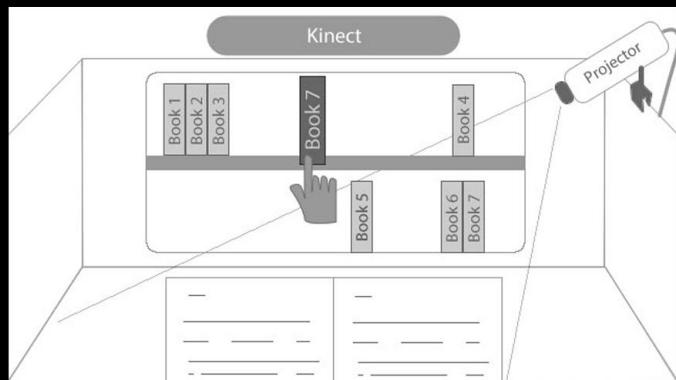
I worked with a team of four people produce a ubiquitous computing experience - one including natural interaction and environment



Gestures supported by the system

Select - Browse through a selection of books

Grab - Select a book to be opened



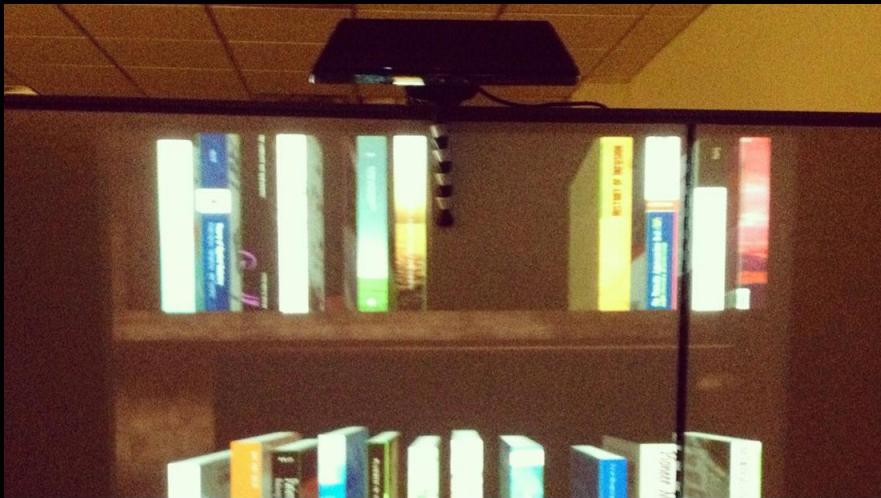
Our team designed a virtual bookshelf with the ability to display e-books within a home or office setting.

We designed the system to work based on 3D gestures, recognized by the Microsoft Kinect

Open - Open the e-book

Close - Close the e-book

3D GeM



The setup involves a projector displaying the bookshelf and a kinect to track gestures performed by the user.



Pilot Study Results

5 out of 6 users were convinced of the utility of the system and were excited to use it

What's next?

Better affordances
Implementation of more use cases

Beautiful Data: Space, Time and Structure

Beautiful information is also useful information

In the fall of 2011, I worked on a project called Tangible Anchoring - a visual presentation cum anchoring system which used tangible interaction (TUIO).

TUIO is an interaction paradigm involving real world objects to interact with computing systems.

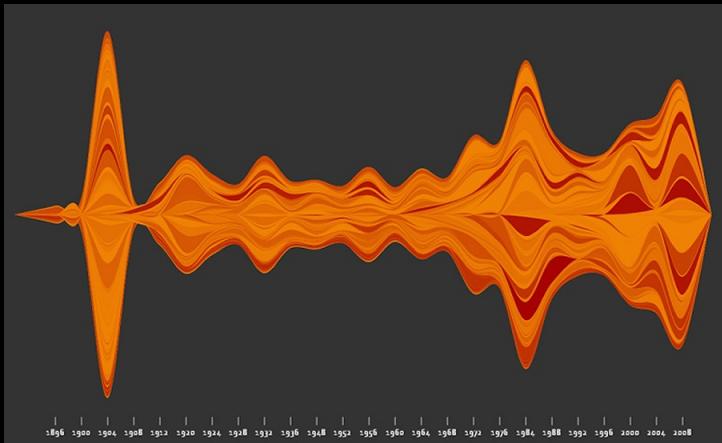
The tangible anchoring system promoted debate and discussion by involving multiple people in the process of information discovery

The inspiration for Planck was the hand driven animation in bioscopes - cinema like devices from the 20th century.

Rotating a control knob to create fluid motion across space, structure and time is the hallmark of Planck



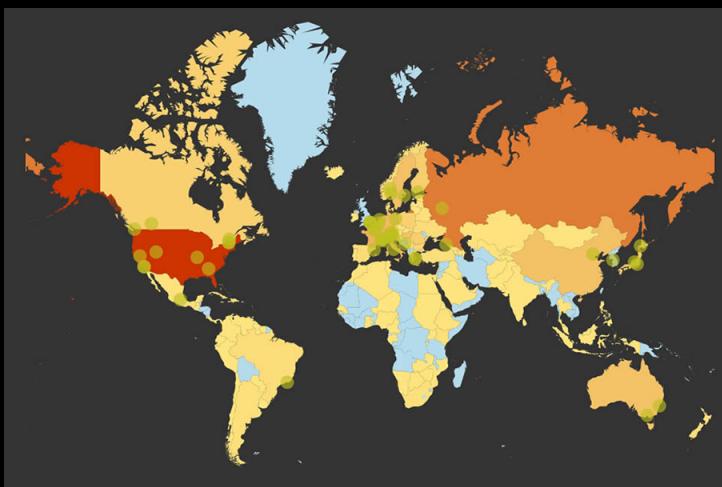
Planck



Themeriver

Planck presents the following visualizations

Themeriver - Themeriver is a compact way to visualize flows of data over time. The bands of data are stacked so that we have a flow across time – a ‘river’ with troughs and crests



Choropleth Map

Choropleth - The choropleth map provides an easy way to visualize how a data parameter varies across a geographic area. It supports proximal pattern discovery as well as hierarchies



Treemap

Treemap - treemaps represent data as a set of rectangular tiles placed adjacent to each other. The size of the rectangle represents the quantity to be visualized. Each tile can contain a treemap in itself if it has children with similar attributes.