PJUG – Portland Java Users Group

"Giving your application Thumbs" Jon Batcheller FAT Tuesday Feb. 21st, 2012

Messaging Basics

- Sending & Receiving
- A connected service provider Twilio
- A Phone Number

Provisioning

- In telecommunication, provisioning is the process of preparing and equipping a network to allow it to provide (new) services to its users.
- Getting a number free sign up, \$1/mo
- SmsWs.java
- Now we have origin/destination number

What Happens – User Sending

- Service provider maps your new number to a URL - "Manage Numbers"
- You write a service to accept the "POST"
- User text's the phone number
- Deal with it! simply a source and a message
 - TwilioServlet.java

What Happens – Sending to a User

- You communicate with your providers web service REST
- Very simple API destination phone #, message
- SmsWs.java

Group Text Notification

- Assisted Living Caregivers
- "Charting" getting vitals, checking up
- Communication "hospital style"
- IPods & iPhones Ioan

Vigilan's "Nurse Charting"

- Webapp iPhone, iPod
- Vaadin mobile application
- JPA Persistence architecture
- Cloud DB Amazon in Virginia
- Visit resident and record vitals
- Notify administration and or caregivers of issues via text

Demo

- Web App
- Alerts
- Quick Vaadin review
- AlertView.java

Group Texting - "Social" Environs

- Group interaction anonymity cool Smack
- Watching Blazers, Superbowl, Grindhouse Movie
- Something else to do while watching and fun

Requirements

- Receive a SMS message and display it for all
- Let a user pick an alias more smack and fun
- Store the alias with the phone number for their next visit
- Turn emoticon text into images animated?
- Display must be simple and mindless WIFI goes down, etc, etc

SmackTV - Backend

- Receive and store the text messages via POST from Twilio
- Embedded Derby database KISS
- Display all messages via an installed Client reboot – trouble free – fine if service or WIFI down
- Client gathers messages via a webservice, for simplicity
- REST service to get messages (and debug)

TwilioServlet.java

- Standard POST
- Sms.java
- Saves message in Derby Embedded DB DerbyClient.java
- GET method for debugging DEMO

SmsMessageWs.java

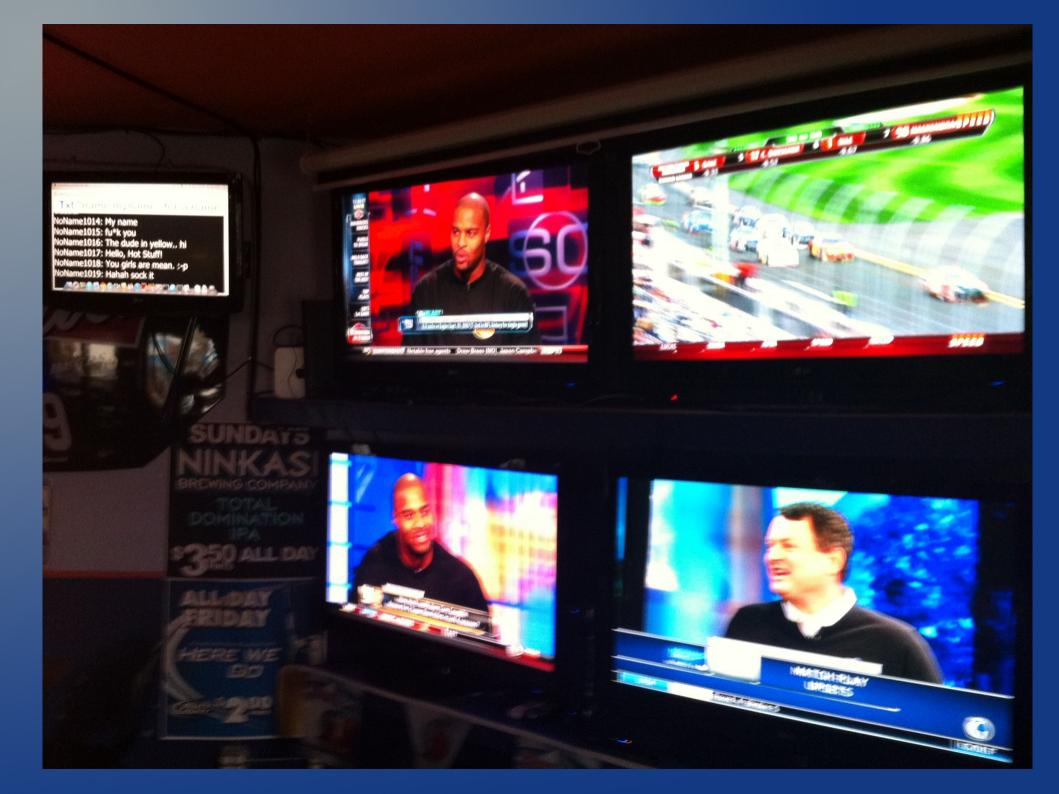
- web.xml
- Jersey JSON Webservice container
- Get next message by Timestamp for Client
- For debugging add a message and get the list of messages

SmackTV Frontend

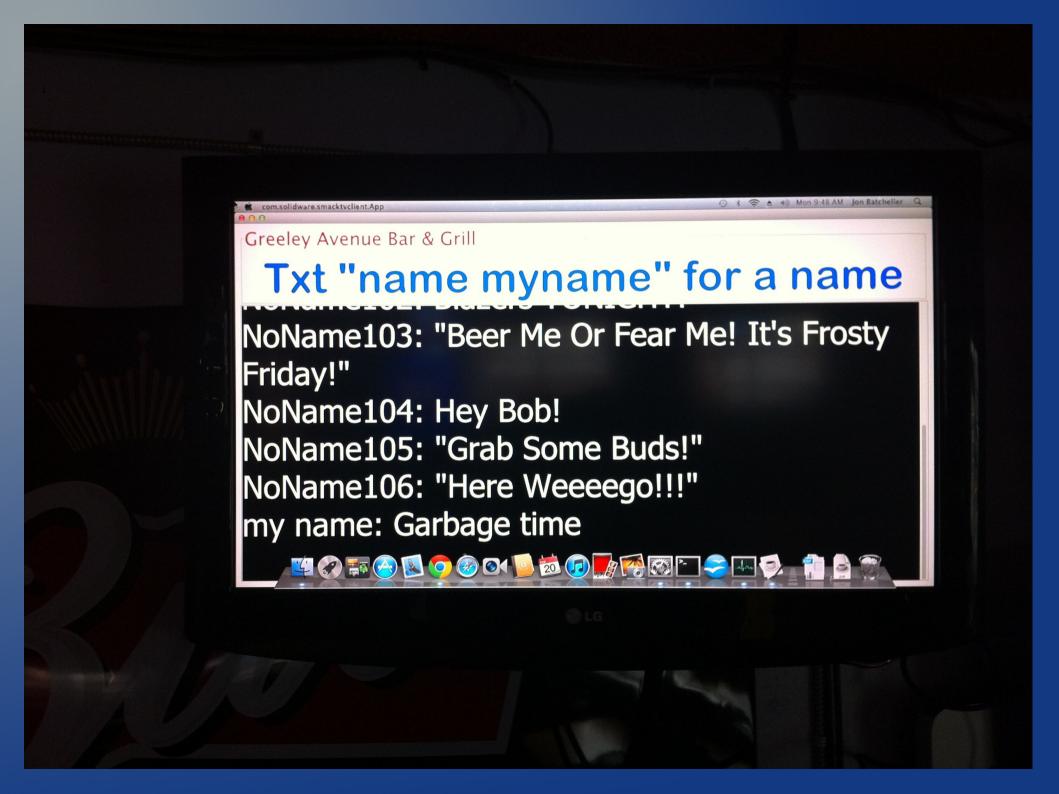
- Installed Swing Application
- Uses backend web service for messages
- Tolerant of WIFI and network outages
- Simple restart for the bartenders
- Test on localhost before deployment

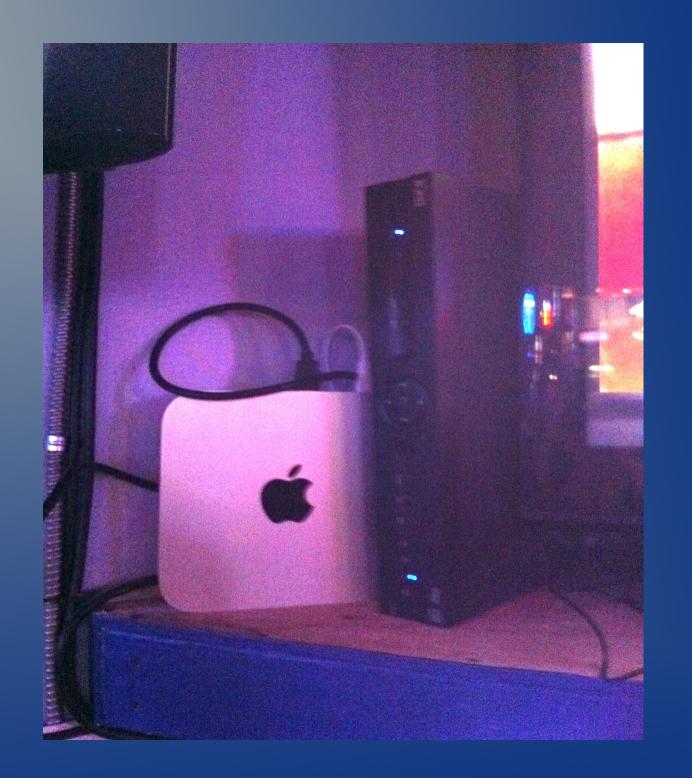
SmackTVClient

- MainFrame.java
- Fetch timer
- Cursor
- DEMO localhost









Drive thru Espresso

- Double thru-put of drive thru if we knew orders before they appear at window
- Over 80% drivers have cell phone, probably much higher for the type A folks getting a morning latte
- Solution let customers text in their orders

Requirements

- Receive the text and display on an iPad via SMS
- Acknowledge the order with a single touch
- Track time from order to completion
- Be able to accept additions and changes
- Ask questions if order incomplete
- Keep a record of their order to repeat tomorrow with "reorder" command

Coffee

- GWT Java Web Application that runs on an iPad
- Client/Server/Shared
- TwilioServlet.java append & reorder
- SmsService.java
- SmsServiceImpl.java
- Coffee.java

Organic Espresso



503-406-6696 DEMO

