



A CONDITION-BASED MESSAGING SYSTEM

SCHEDULE

- × Project proposal
- × System Overview
- × Demonstration

- × con·di·tion

- × [kuhn-dish-uhn]

- × **Noun**

- × 1.a particular mode of being of a person or thing; existing state; situation with respect to circumstances.
- × 2.state of health: *He was reported to be in critical condition.*
- × 3.fit or requisite state: *to be out of condition; to be in no condition to run.*
- × 4.social position: *in a lowly condition.*
- × **5.a restricting, limiting, or modifying circumstance:** *It can happen only under certain conditions.*

CURRENT POPULAR MESSAGING SYSTEM

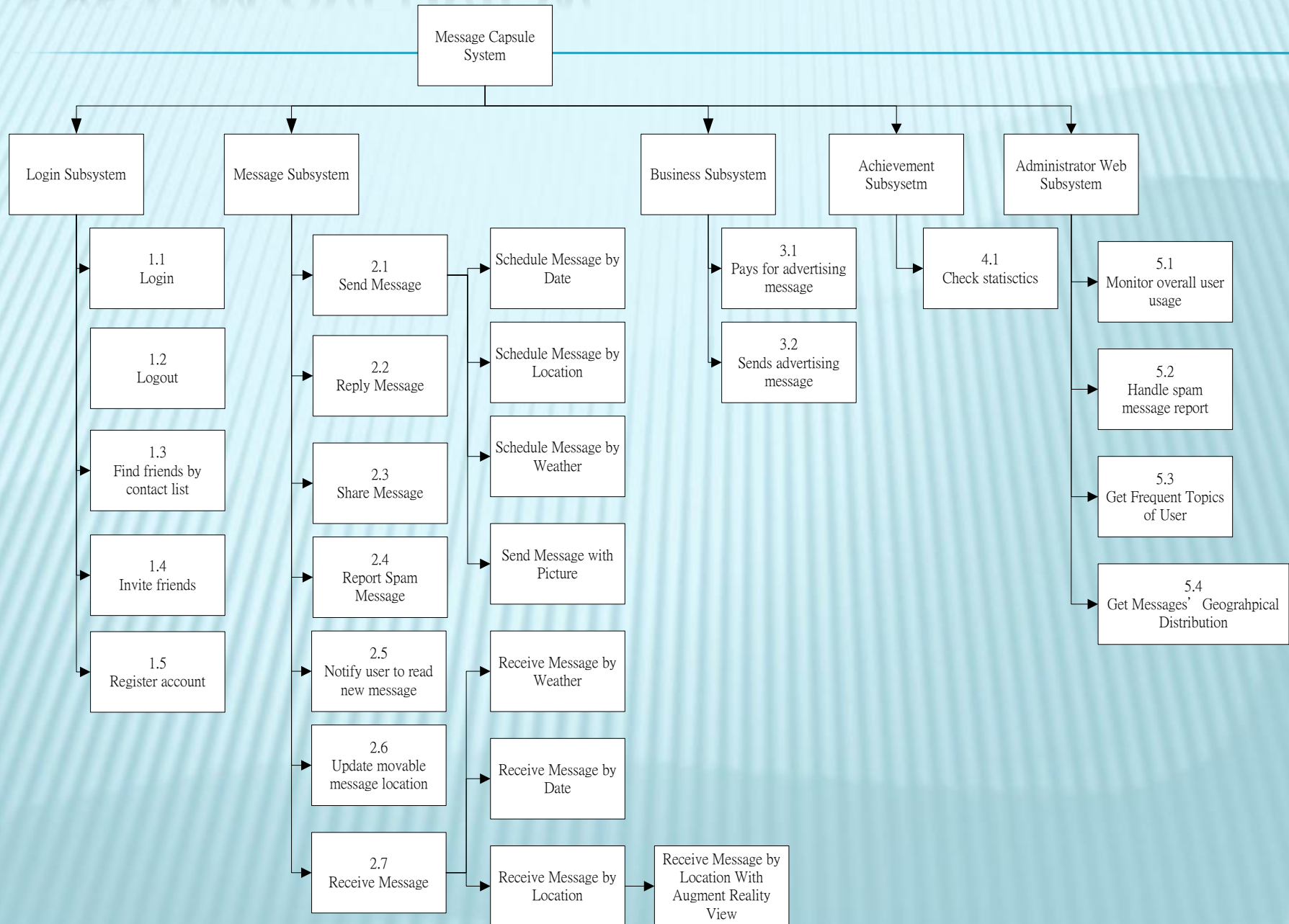
- ✖ Whatsapp
- ✖ Wechat
- ✖ Line
- ✖
- ✖ Excellent IM
- ✖ Nice and fancy interface, icons.



BUT.....

- × What' s the difference between them and older messaging system? (Like the dead MSN?)
- × Not much
- × The functionalities of mobile devices are not fully unleashed by these apps
 - + e.g functions base on
 - + Location estimation
 - + Weather
 - + Date
 - + And other available sensors.....

SYSTEM OVERVIEW



FEATURES

- × Instant message
- × Messages with conditions like time, location, weather and their mixs, etc.
 - + Support more real world scenarios.
- × Administrator web subsystem
 - + For administration and data analysis

SOFTWARE TOOLS USED

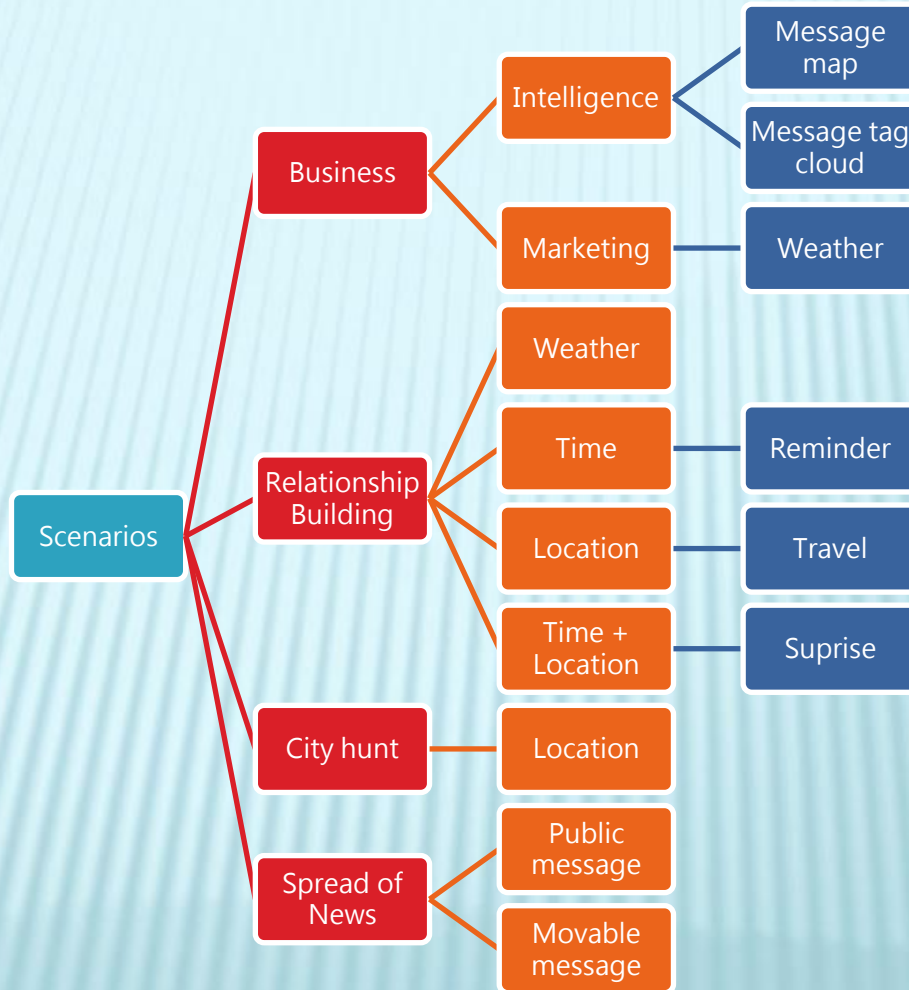
	Software/Technology Name	Description	Home Link
Backend	Java EE	The backend sever	
	Tomcat	The JAVE EE server container	
	Postgresql	The DBMS being used	http://www.postgresql.org
	Postgis	The plug-in to enable spatial data storage in DBMS	http://postgis.refractor.net
Frontend	Android	Serve the client in mobile	
	JSP	Serve the client in web	
Development Tools	Eclipse	The IDE for development in server and client-side	
Services and Libraries and Other Resources Usage	Openstreet Map API	The API for location finding	http://wiki.openstreetmap.org/wiki/Nominatim
	Open weather Map API	The API for weather finding	http://openweathermap.org/
	Google Cloud Messaging	The library for data synchronization	http://developer.android.com/google/gcm/index.html
	Basic HTTP Client	The library for data exchange	http://code.google.com/p/basic-http-client/
	Google Map API	The API for map showing	https://developers.google.com/maps/

Bootstrap	The template for web user interface	http://twitter.github.com/bootstrap/
Wikitude	Augmented Reality SDK	http://www.wikitude.com
Iconfinder	An icon finder	http://www.iconfinder.com
Foundation	The Front-end framework for web user interface	http://foundation.zurb.com
Leaflet	Javascript Library for mobile-friendly interactive maps	http://leafletjs.com
Android SDK	The SDK for android apps development	
Sample code to sense phone acceleration speed and direction	Use for sending movable message	Chapter 4 - Interacting with Device Hardware and Media Android Recipes: A Problem-Solution Approach by Jeff Friesen and Dave Smith Friends of Ed © 2011 Citation

DEMONSTRATION

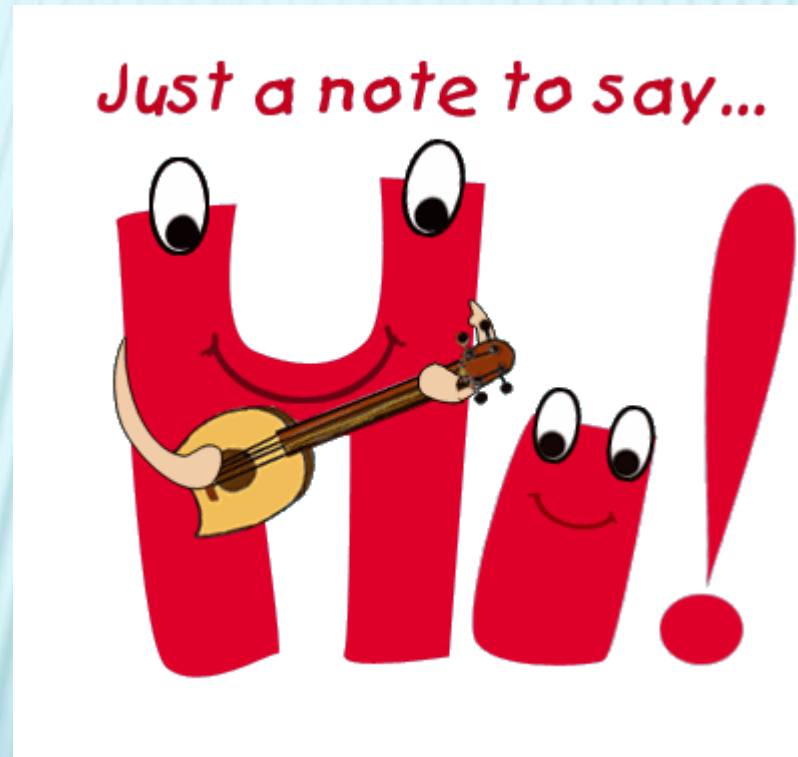
DEMONSTRATION

SCENARIO SUPPORT



INSTANT MESSAGE

- ✦ Scenario: send a message just to say hi



TIME

- ✖ Scenario: send a message as reminder



LOCATION

- ✖ Scenario: mine a message in tourist attraction

LOCATION

✦ Scenario: treasure hunt



TIME + LOCATION

- × Scenario:
- × mine a message in a location, notify the receiver early on, tell him/her to go there in time

WEATHER

- ✖ Scenario: When It' s rainy, tell her to bring umbrella.
- ✖ Weather condition: rain

WEATHER AND PUBLIC MESSAGE

- ✖ Scenario:
- ✖ When it's hot, tell customer to come and eat ice cream
- ✖ Temperature



MOVABLE MESSAGES

✦ Scenario:



ADMIN WEB SUBSYSTEM

- × Administration
- × Data analysis

IMPROVEMENT

- × More customization
- × More functions cater for business users
 - + Promotion
 - + news
- × Better UI
- × More stable
- × More conditions
- × Integrate with Facebook