Master Project Proposal Presentation

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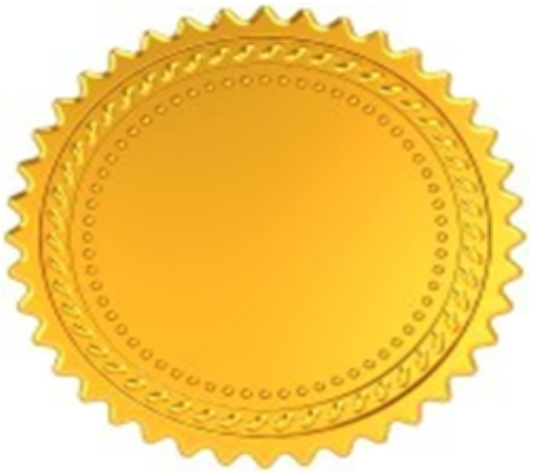


Development of a Cloud-Based Reward Application

Committee:

Dr. Turner (adviser), Dr. Concepcion,

Dr. Botting

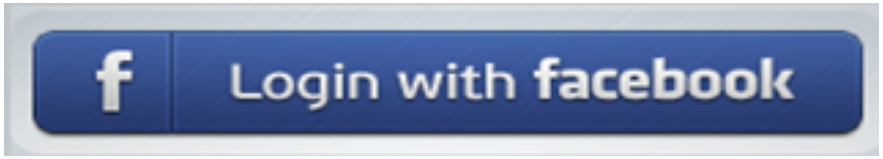
Abstract

- The next era is cloud, social and mobile. I call it “Web 3.0” (or rather Web 2.1)

- Cloud – Scalable, hosted runtime environment
- Social – Integration to social networking site
- Mobile – Mobile phone access friendly

Reward Application

- Gamification
- Fun way for organizations or groups to motivate their members
- Keep members engaged by giving badges as rewards for efforts or accomplishments
- Integrated with Social Networking Site



Example - Yoga Groups Scenario

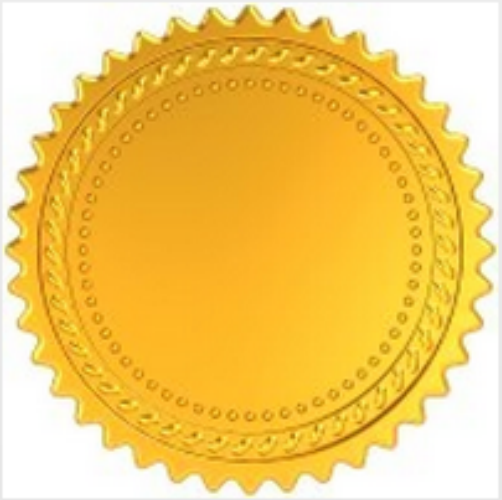
- People love to be rewarded and acknowledged for their achievement.(Belts color in Martial Arts)

Example:

- Yoga instructor would give badges to new members as they completed some milestones in their progress,
  - completed 5 yoga sessions in a week
  - 100 yoga sessions attended
  - 30 days vegan detox

Back

Badge Details



Group:

Yoga Group

Badge Name:

100 Classes Attanded

Description:

This badge is for members who have come to r

Facebook this badge!

My achievements (17)

First Lesson
March 31, 2012

10 Exercises
March 31, 2012

25 Exercises
March 31, 2012

Getting Started with Programming
March 31, 2012

FizzBuzz
March 31, 2012

50 Exercises
April 18, 2012

Max Streak Count of 1
August 4, 2012

Hello, New York
August 4, 2012

25 points earned in one day
August 5, 2012

100 Exercises
August 5, 2012

Basic jQuery
August 5, 2012

50 points earned in one day
August 6, 2012

Basic jQuery - Part Two
August 6, 2012

Max Streak Count of 3
August 6, 2012

jQuery Events
August 8, 2012

Technology Used

- Node.js - a server-side JavaScript development technology
- MongoDB - a scalable, high-performance, open source, NoSQL database. JSON-style document oriented.
- Heroku – cloud service provider that work well with Node, MongoDB and Facebook
- GitHub – cloud repository
- HTML5, CSS, Javascript

Why Node.js?

- Node.js scales better, running under Google Chrome's V8 javascript engine.
- It runs an event based system in one thread.
- Callbacks for almost everything, and thread never needs to wait for I/O to finish before moving to something else

```
var http = require('http');
http.createServer(function (req, res) {
  res.writeHead(200, {'Content-Type': 'text/plain'});
  res.end('Hello World\n');
}).listen(1337, '127.0.0.1');
console.log('Server running at http://127.0.0.1:1337/');
```

Why MongoDB?

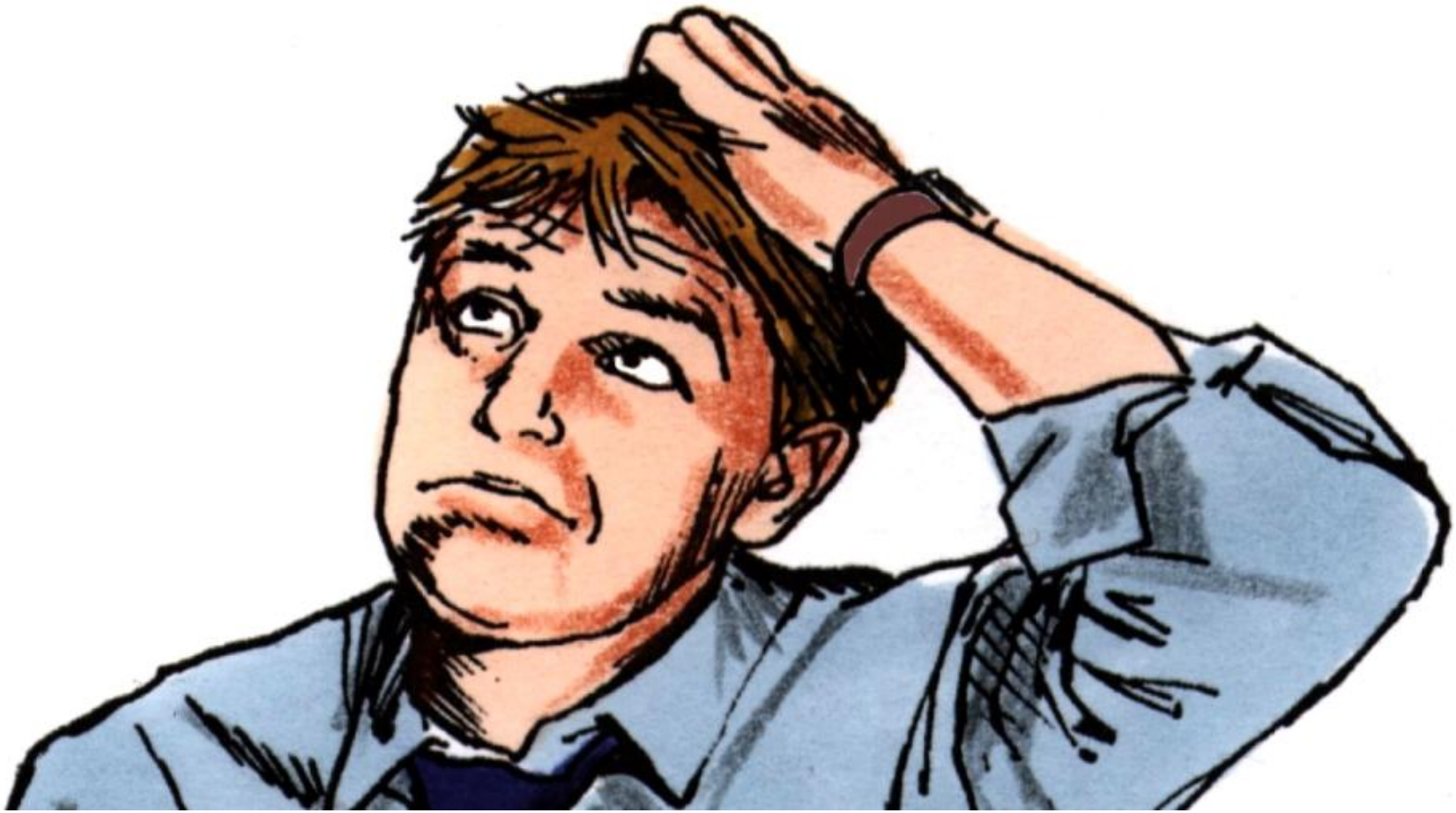
- Again SCALABLE - "Webscale" and Agile
- High Performance.
- JSON-style document oriented

```
{
    _id: 1234,
    author: { name: "Bob Jones", email: "b@b.com" },
    post: "In these troubled times I like to …",
    date: { $date: "2010-07-12 13:23UTC" },
    location: [ -121.2322, 42.1223222 ],
    rating: 2.2,
    comments: [
        { user: "jgs32@hotmail.com",
          upVotes: 22,
          downVotes: 14,
           text: "Great point! I agree" },
        { user: "holly.davidson@gmail.com",
          upVotes: 421,
          downVotes: 22,
           text: "You are a moron" }
    ] ,
    tags: [ "politics", "Virginia" ]
}
```

Why Heroku?

- Works better with Node.js and MongoDB
- Deploy directly from GitHub - "git push prod"
- Agilie Deployment
- Easy to create development, staging, production version and deploy to and between them instantly
- Easily scale by adding "dyno"
- Official Facebook app hosting.

Any Question?



Thank you!