Key Aim

Data Rich Applications and Open Data
What is a data rich application?
But what makes a rich application?
Nike+GPS

Summary
Your Run on 6/19/11 at 12:25pm
7.52mi
8'56"/mi 1:02:06 431 cal

TAG
Play Nike+ Tag
Share Run
Route Info
How was your run?

Cheers
Lance Armstrong
9 friends have cheered you on.

History
Monday
14.7mi

Saturday
12.8mi
12/23/09
5.42mi
National Rail

Departures

<table>
<thead>
<tr>
<th>Location</th>
<th>Time</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birmingham New Street</td>
<td>16:03</td>
<td>Departed 3 minutes late</td>
</tr>
<tr>
<td>Birmingham International</td>
<td>16:14</td>
<td>Departed 2 minutes late</td>
</tr>
<tr>
<td>Coventry</td>
<td>16:25</td>
<td>Departed 4 minutes late</td>
</tr>
<tr>
<td>Leamington Spa</td>
<td>16:38</td>
<td>Departed 3 minutes late</td>
</tr>
<tr>
<td>Banbury</td>
<td>16:55</td>
<td>2 minutes late</td>
</tr>
<tr>
<td>Oxford</td>
<td>17:16</td>
<td>On time</td>
</tr>
<tr>
<td>Reading</td>
<td>17:46</td>
<td>On time</td>
</tr>
<tr>
<td>Basingstoke</td>
<td>18:08</td>
<td>On time</td>
</tr>
<tr>
<td>Winchester</td>
<td>18:24</td>
<td>On time</td>
</tr>
</tbody>
</table>

Live Progress

UK Train Times

Journey Planner

- Next train home
- Plan a journey
- Recent search results
- Select a station
- London Paddington departures
- Calling at Reading
- Reading departures

[Image of train schedule and journey planner interface]
Foursquare
Applications and data are resources which can be used to build new applications... quickly.

Rich applications source data and services from many places to provide something new.

Presented in the correct way, a simple breakthrough can make a $RICH$ Application.
What makes a rich application?

Pretty
Addictive
What makes a rich application?
From the Course Outline (1)

- User centric (participatory) design
- HCI, user experience, limitations and success factors
- Top-down development and bottom-up design.

Now called UX Design

(User eXperience)
From the Course Outline (2)

- Evidence based research in developing rich, maintainable and usable applications.

- Main current debates within the discipline and theories informing these debates.
Lastly…

- Agile
Recap…

- In this module we are going to look at the benefit of using open data to develop rich applications.

- By focusing on the end user and target market we are going to look at how to pitch a product and potential build a business.
Course Topics

- Validation
- Discovery
- Alignment
- Importing
- Open-Data
- Linked-Data
- Agile
- Top-Down
- Mobile
- Development
- Visualisation
- User-eXperience
- Re-Usability
- Focussed-Design
- Addiction
- Open-Innovation
- Intellectual-Property
- Marketing
- Pitching
Lectures

- 2 a week until after Easter.

- Guest Lectures
  - Will fit in schedule dependent on guest availability

- Keep an eye on the website and turn up to find out what is happening.

- www.ecs.soton.ac.uk/notes/info6005
Course Balance (Teaching)

Technologies

Data
Linked-Data
APIs
Mash-ups
Validation
Alignment

“The Bigger Picture”

Open Innovation
Marketing
Pitching
Psychology
Games
UX Design
Course Outline

- First 5/6 Lectures
  - Open Data
  - Discovering Open Data
  - Importing
  - Validating
  - Aligning
  - Visualising

Coursework 1 - Visualisations
Coursework 1 - Visualisations

- Take a given data set and visualize the data for discovery and exploration in at least two different ways.

- Not sure if maps will be banned.

- Individually assessed.

- (To Be Confirmed)
Course Outline

- ~9 Lectures
  - Rapid Innovation
  - Mobile Development
  - UX Theory and Evaluation
  - Game Theory
  - Addiction
  - Open Innovation and IP
  - Pitching

Coursework 2 – A Rich Application
Coursework 2 - Develop and Present a Rich Application (Group)

- This is an open ended coursework however:
  - It **must** use at least two sources of open data
  - **Must** show good UX Design
  - **Must** be a product with a target market
  - **Must** use at least one technology outlined on this course.
  - **Must** have a working prototype that demonstrates above (not necessarily complete).
Coursework 2 - Assessment

- Each application will be pitched to a panel of professional judges (dragons)
  - The Pitch is worth a lot of marks

- Each application must be accompanied with report (~8 Pages, no more than 12) outlining design choices and target markets
Little tip for success on this course

Produce products, not code

(code is a tool used to produce a product)
Good Luck and Have Fun