Bachelor of Science (Third Year)
CSD101- Human Computer Interaction
Title of the Unit : Mobile HCI
Module Name : Mobile 2.0
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Mobile 2.0

Introduction
- Mobile 2.0, "borrowing from, many of the same principles behind web 2.0".
- Each of these principles of web 2.0 serves to transform the web into a more agile and user–centered medium for delivering information to the masses.
- Mobile development, under the bottlenecks of device fragmentation and operator control, is really in need of a little reinvention as well.
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The original seven principles of Web 2.0:
1. The Web as a platform
2. Harnessing collective intelligence
3. Data is the next Intel inside.
4. End of the software release cycle
5. Lightweight programming models
6. Software above the level of a single device
7. Rich user experiences.

Comparison of seven principles of Web 2.0 with Mobile technology
1. **The Web as a platform:** costly native applications deployed over the multiple framework and networks.
   For mobile context, its "write once, deploy everywhere."
2. **Harnessing collective intelligence:** done on web by projects such as WURFL.
   Mobile community has not done much in this area.
3. **Data is the next Intel inside**:
   Mobile takes this principle several steps further. It includes the data we seek, create and data about and around us.
4. **End of the software release cycle:**
   In mobile development as a business, shorter agile (ie. Development and testing) cycles are needed, to increase profitability.
   Releasing for one device, iterating, improving and then releasing for another is a great way to ensure profitability.
5. **Lightweight programming models:**
   Mobile technology is built on enterprise java, so this principle is viewed with some skepticism. This means more innovation, occurs faster.
6. **Software above the level of a single device:**
   Software is not constraint only for computers, but work in multiple context such as mobile phones, portable gaming consoles and e-book readers.
7. **Rich user experiences:**
   Helps people spend less time with the software and more time living their lives.
   Mobile design is about enabling users to live their lives better.

Principles of Mobile 2.0

1. The Convergence of the Web and Mobile
2. The Mobile Web Browser as the Next Killer App
3. Mobile Web Applications Are the Future
4. JavaScript is the Next Frontier
5. The Mobile User experience is Awful
6. Mobile Widgets are the Next Big Thing
7. Carrier Is the New "C" Word
8. Mobile Needs to check Its Ego
9. We are Creators, Not Consumers.

1. The Convergence of the Web and Mobile

- ❖ Here mobile 2.0 is web, and is viewed as second class citizen within mobile ecosystem.
- ❖ Mobile 2.0 is a medium integrating web services.
- ❖ When iphone exploded onto the scene, mobile web users were increased to a number never seen before. Further, mobile web apps created doubled, the number of mobile websites available.
- ❖ If web 2.0 taught us that the web is the platform, the mobile 2.0 tells us that mobile will be primary context to influence the web in future.

2. The Mobile Web Browser as the Next Killer App
- ❖ This is true if the future of mobile is web.
- ❖ Device fragmentation is the major factor for mobile browsers.
- ❖ Mobile browsers help us to access the content despite of different device abilities, screen size and form factor.

Example:
- • Mobile safari browser of iPhone provided an excellent web experience on a mobile device that drove use of the mobile web to huge levels, which means big profit for the operators. These operators are demanding better browsers from device makers and browser makers.
- • All new devices are judged by the quality of their mobile web browser.

3. Mobile Web Applications Are the Future
- ❖ Creating mobile web applications instead of mobile software applications taking web 2.0 revolution for inspiration.
- ❖ Developers are keen to shift away from costly mobile applications.
- ❖ Iphone app store has made it easy to publish and sell, but developers still face difficulties with operators and device maker terms and porting challenges.

Mobile software has 2 problems, that mobile web applications solve.
1) Provides any size developer to promote and distribute their app building a relationship directly with their customers.
2) It gives ability to update your application, which is not possible in the downloaded app market.

4. JavaScript is the Next Frontier
- ❖ To make use of mobile web applications, you should have a mobile web browser that supports Ajax and JavaScript.
- ❖ JavaScript has been a no-go in mobile for years.

- ❖ In order for mobile web apps to rival native applications, you have to support some JavaScript.
  For example: Accessing the device capabilities like the phone book with JavaScript doesn't work in a consistent way. These problems still need to be solved in order to truly reap the benefits of the web.
- ❖ JavaScript and Ajax has been ignored as use of this in web application on your phone drains your battery at a faster rate.

5. The Mobile User experience is Awful
- ❖ Traditionally the user experience in mobile web was like using a website from 1995; mostly text based, difficult to use and ugly as sin.
- ❖ If you wanted a good experience, you built a native app.
- ❖ Traditionally complex user experiences haven't been possible on mobile devices.
- ❖ Now a days, subsequently, the modern web browsers are solving this issues.

6. Mobile Widgets are the Next Big Thing
- ❖ Mobile widgets is to create a series of "small webs" targeted at a specific user or task.
- ❖ The concept of small network enabled applications is very promising.

7. Carrier Is the New "C" Word
- ❖ Mobile experts prefer to see a future with no mobile service providers at all.
- ❖ Mobile industry has finally figured out that very few can make profit when your business relies on carriers.
- ❖ Focus on the mobile web is to find a way to build a business that doesn't rely on carrier control.

8. Mobile Needs to check Its Ego
- ❖ Mobile community and web community have treated each other almost like a rival, and it is the mobile community that needs to check their egos.
- ❖ On mobile side, some incredibly intelligent people, have been innovating amazing products under the insane constraints for years.
- ❖ On the web side you have creative amateurs who have helped build a community and ecosystem out of passion and an openness to share information.
- ❖ Unless the mobile community come together with web community by sharing information, experience and guidance, one day they will find that their experience has become obsolete.

9. We are Creators, Not Consumers.
- ❖ The people of todays market don't view themselves as consumers, but rather as creators.
- ❖ Early web 2.0, we saw rise in tools such as Social media (blogging, social networks, media sharing, etc.) allowed everyday people to become creators and publishers of content.
- ❖ As networked portable devices become more powerful, has allowed us to capture, record and share content easily.
- ❖ Tony fish says:
  "When every one has the tools to create content, in addition to   zero cost publishing , we do not consume content, we create it.**"**
- ❖ To change society forever.