

CLOUD DIAL

A cloud based visual bookmarking service

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Description :

Cloud Dial is a cloud based visual bookmarking service. Put simply, it is a bookmarking service, where a user's bookmarks are stored in the cloud. These bookmarks will be tagged with descriptive text, as well as an image. It is hoped the visual element will make it practical and visually appealing for the user to make this application their browser's home page. Doing so they can quickly access chosen sites, and collected bookmarks.

Background-

My idea for Cloud Dial was inspired by existing services I use not addressing my needs. Namely Delicious and Speed Dial. While these services are both excellent in their own rights, I felt a combination of the two with improved functionality where both fall down would be very useful.

Delicious is an excellent and popular bookmarking service. However it fails to address the rise of mobile computing adequately. The necessity for a more visual element in applications is of far greater importance now. Mobile users do not want to browse through masses of text where images would make the task more straightforward. Similarly excellent searching functionality would also improve this. While Delicious does offer searching functionality, this could be much improved.

Speed Dial is another popular and quality service. It allows a user to preselect a collection of websites which will appear in a grid display, using an image to represent that site. With this as their home page a user can quickly visit a chosen site. However it is usually browser specific, and is intended only as a group of short cuts to a select number of pages. I feel integrating this with bookmarking is a natural extension. Groups and sub-groups could easily be used to categorise users' data.

Making this cloud based is an obvious choice. Users want to be able to access their information everywhere. Bookmarking is a widely used feature, and with improvements in technologies and the rise of cloud computing there is scope for creation of a very effective service. A service which will fulfil the needs of users unsatisfied with the current options, and stand out where the others fall down.

Achievements-

It is hoped this service will be used by all web browser users, but more specifically by those who bookmark regularly. As bookmarking is generally a native feature of many device's browsers it is important that a user experiences similar performance even though the extra cost of being cloud based is added. Using new technologies such as HTML5 and NodeJS, it is hoped to improve on existing services' performance. Developing with this in mind is the main priority.

Cloud Dial aims to provide a clear, simple to use service, where users can both store and retrieve bookmarks with ease on any supported device. It should be easy to personalise, and possible to share amongst friends. Accessible, and intuitive.

Justification-

I think the best way to justify Cloud Dial is to list its main functionalities and explain their uses.

- Cloud based:
 - Stored bookmarks are accessible on all devices. Such services already exist, however Cloud Dial will make use of new technologies to outperform these.
- Visual bookmarks:
 - A lot of text can be difficult to browse on mobile devices. It is hoped adding a visual element, such as a site logo or informative screen shot of the page in question, will make this task more bearable. The user will also have the option of making Cloud Dial their browsers home page, doing so they can easily access chosen pages through the interface's appealing design.

- Cross platform:
Since this service is being developed as a web application it will be usable on all devices with a web browser. The front end code will be developed in HTML5 which also leaves the possibility of porting it as a native application using third party tools like PhoneGap.
- Frictionless sharing:
Cloud Dial is not intended to be a social network. Instead it will make use of Facebook's Open Graph to enable real time sharing of bookmarks on Facebook.
- Intelligent suggestion:
Cloud Dial will intelligently suggest images to visually tag bookmarks, textual tags to describe the bookmarks contents, and bookmarks that may interest a user.
- Improved searching:
The intelligent suggestions will aid with bookmark searching. Tag suggestion to refine a search is also intended, as well as multiple ordering options.

Project Language(s) :

HTML5, CSS3, Javascript(Jquery, Coffeescript, Qunit, Node.js, Backbone.js), JSON/XML, PHP, Python.

Project Tool(s) :

Eclipse, Git, NoSQL(CouchDB/MongoDB), Facebook API, PhoneGap, JSLint, Browserstack.

Learning Challenges :

The term "Cloud" is a quite overused buzz word, but the area it represents is new for me. Using the technologies relevant to cloud computing will be a learning challenge, and will undoubtedly present me with many obstacles throughout the course of development.

As I stated previously Cloud Dial dial will not be a stand alone social network. However I intend on using Facebook's Open Graph to make it optionally social. I have not used any of Facebook's development suite previously, which is obviously a learning point in itself. However I feel this may create options for me to further extend other functionalities by creating social links between users. This would be an interesting challenge.

Intelligent suggestions and improved searching are interlinked functionalities. For these I may use data mining, information retrieval techniques, and elements of AI. I have a little experience in each of these areas, which will leave a lot to learn.

The challenge I look forward to most however is finding how best text and images can represent a particular bookmark. This will bring me into the realms of human computer interaction, and area I'm quite interested in. Testing and experimenting to find this balance will be extremely challenging.

But in my mind the greatest difficulty will be designing Cloud Dial in such that a way that it can be easily enhanced and improved. There is undoubtedly much scope for extension of this service. For it to be truly successful it should be developer friendly. The architecture of Cloud Dial will be designed carefully with this in mind.

Hardware/Software Platform :

Any browser. However Cloud Dial will be developed and tested principally on Google Chrome 14+, and Mobile Safari.

Special Hardware/Software Requirements :

iPhone, iPad, Android tablet and smartphone, Windows Phone 7, Windows tablet PC.