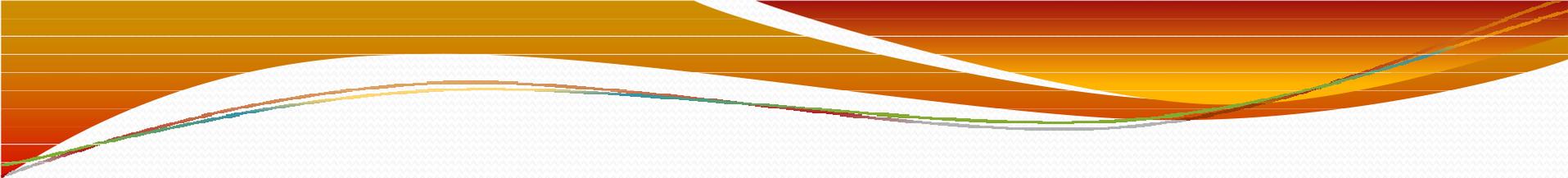


DSpace REST ClientUI

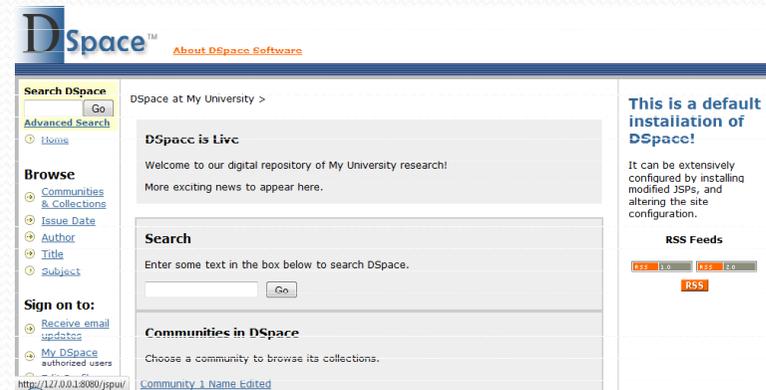
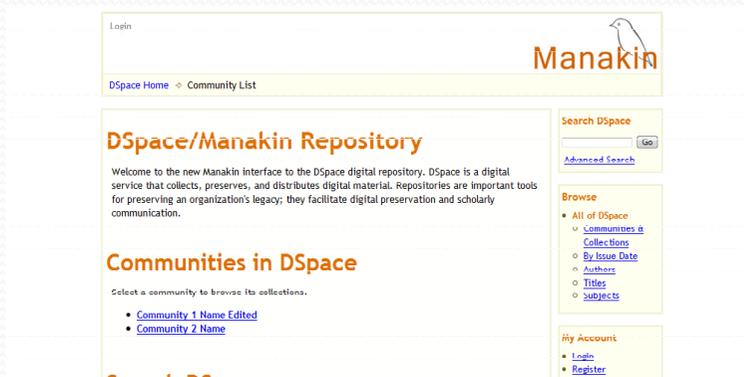
GSoC 2011 | Vibhaj Rajan | vibhaj8@gmail.com



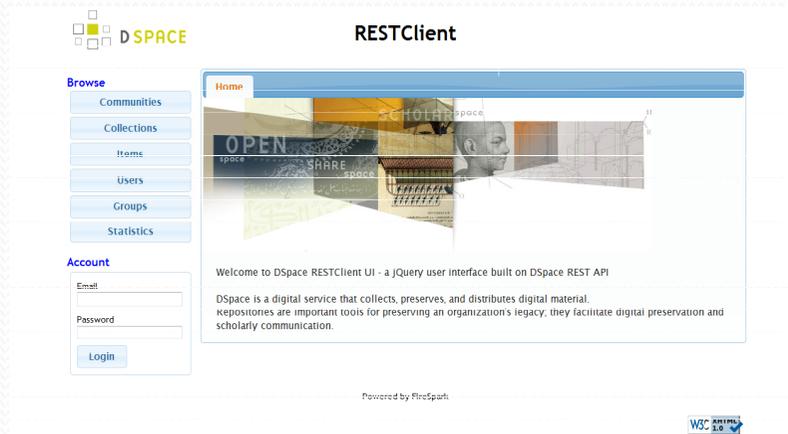
Introduction

- With the successful development of the DSpace REST API during 2009-10 GSoC, the stage was set to experiment its usage by developing a Client-run User Interface.
- Separation of presentation logic to the client end became possible by interfacing the REST services.
- The UI developed could therefore be built with modern technologies for attractive look & feel and enhanced usability.

DSpace User Interfaces

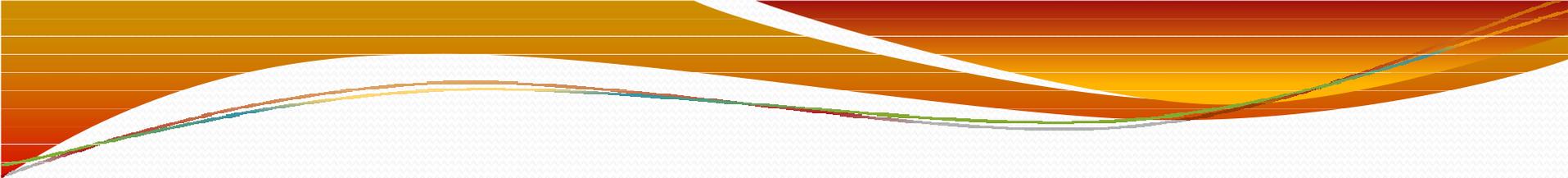


XMLUI



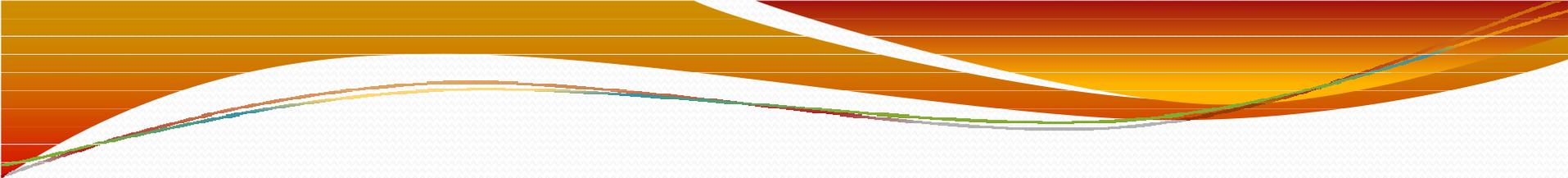
JSPUI

RESTUI



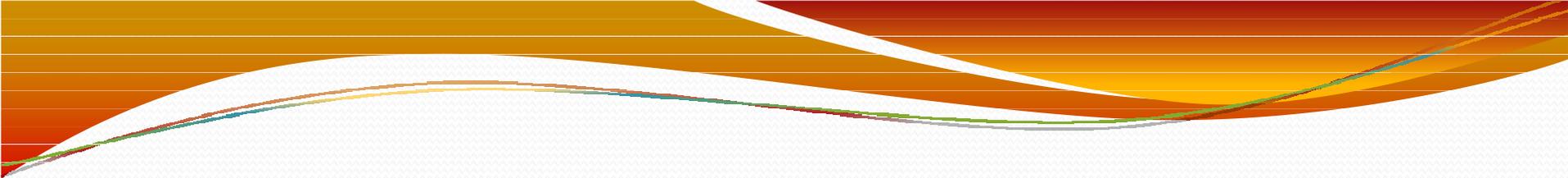
Technology

- Dsace REST API
 - Developed as GSoC project in 2009-10
- jQuery
 - Decided by the community
 - Fast
 - Compact / Lightweight
 - Rich Functionality
 - Themable UI Framework
 - Easy to learn and use



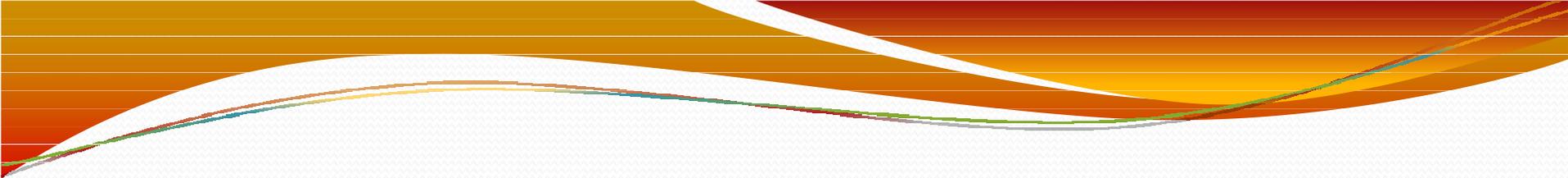
Client Platform

- FireSpark
 - JavaScript Service Computing Platform
 - Built using jQuery
 - Extremely Flexible
 - Robust
 - Easy to Use
- Service Computing
 - Under my current research
 - Service oriented programming model



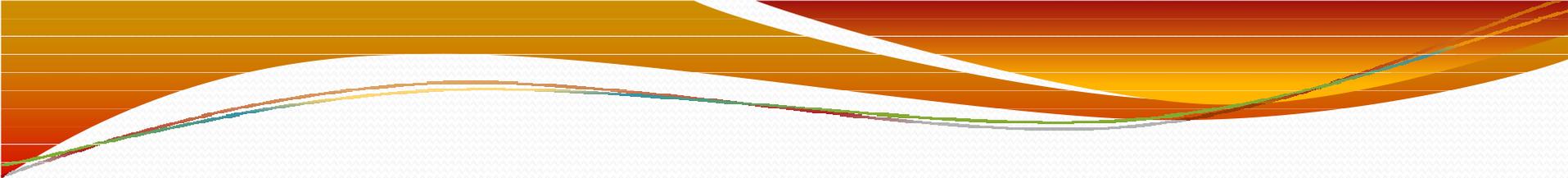
Other Features

- RESTClient Extensions
 - Tailored to interface RESTful services
 - Easy and flexible to reuse in other similar applications
- jQuery Templates
 - Easy to learn and use
 - Separation of interface code from functional code in presentation layer at client end
- CKEditor
 - Rich Text Editor for easier manipulation of HTML content



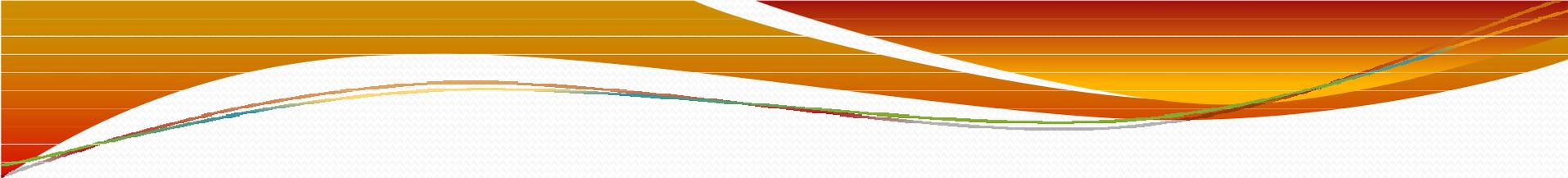
Capabilities

- Repository Browsing
 - The following are supported :
 - Communities
 - Subcommunities
 - Collections
 - Items
 - Bitstreams (including download)
 - Following entities may also be browsed :
 - Users
 - Groups



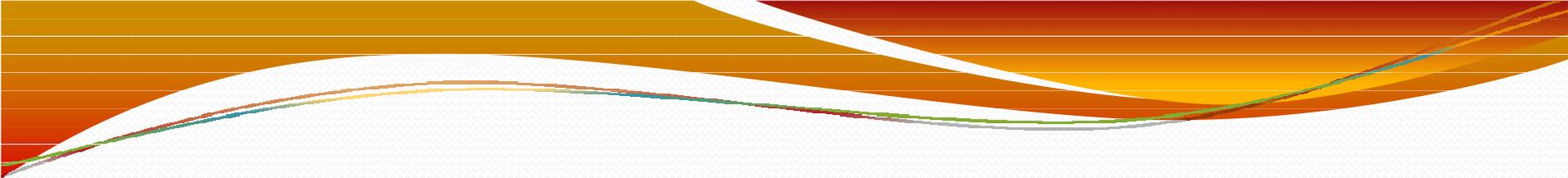
Capabilities

- Repository Manipulation
 - The following edit options are supported
 - Communities
 - Name
 - Short Description
 - Introductory Text
 - Copyright Text
 - News
 - Collections
 - Name
 - Short Description



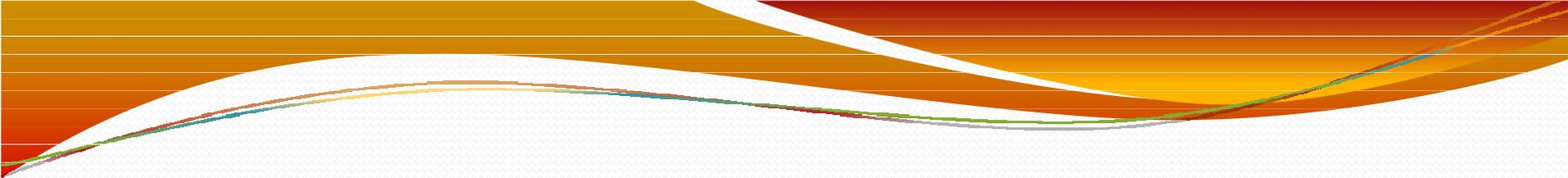
Capabilities

- Introductory Text
- Copyright Text
- News
- Provenance
- Licence
- The following delete options are supported
 - Communities
 - Remove Subcommunities
 - Remove Collections
 - Delete Community



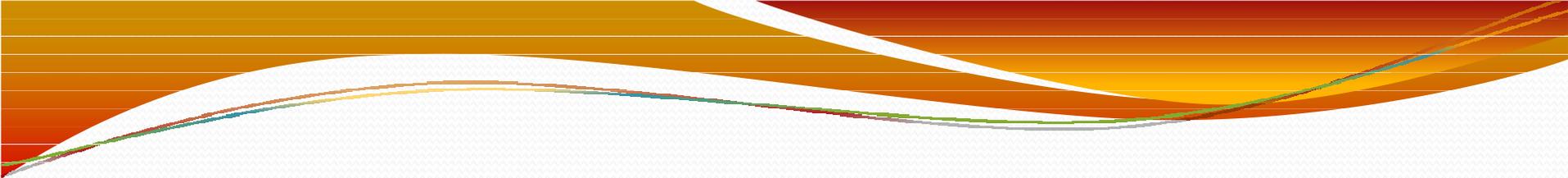
Capabilities

- Statistics
 - Global statistics are viewable
 - Google Chart API is used for generating charts with related data for better understanding of the statistics
- Authentication
 - Authentication is simple (within URL) as currently supported by REST API



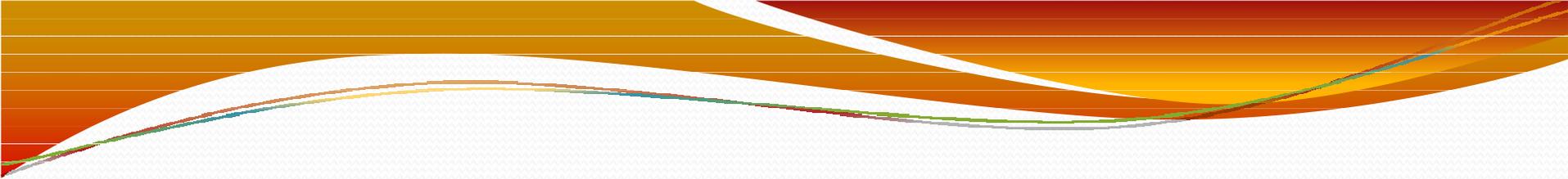
Customizations

- Stylesheets
 - The appearance may be tweaked using individual stylesheets within the `dev/styles/` directory within source and building the UI using the provided build script
 - Global appearance is controlled by the stylesheet `ui/css/default.css` and `ui/css/layout.css`
 - Browsing is currently accomplished using Tabpanel container as supported by FireSpark. Other containers are under development.



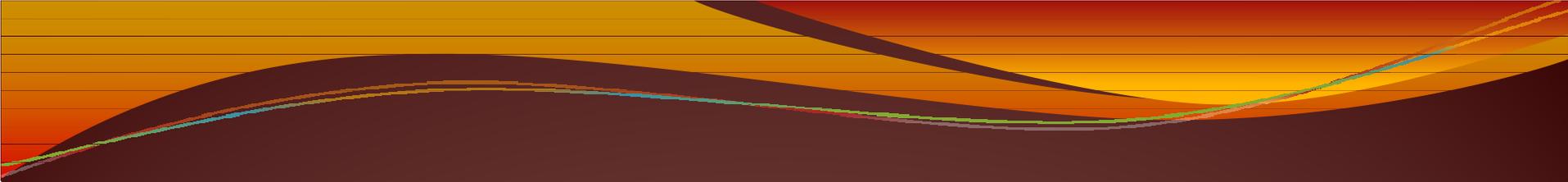
Customizations

- Themes
 - jQuery UI Themes are available from <http://jqueryui.com/themeroller/>



Future Developments

- Complete the Repository Manipulation capabilities as REST API gets finished
- Support Search and Harvest in the UI
- Support Administrative tasks and Submissions in the UI
- Add support for internationalization into FireSpark and thereby RESTClient



Thank You