UNLEASH THE
POWER OF THE GRAPH

Real-world Use Cases

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Founder & CEO Structr
Please ask questions via the mobile app!

Engage
UNLEASH THE POWER OF THE GRAPH

Real-world Use Cases

Axel Morgner (@amorgner)
Founder & CEO Structr
Graphs are eating the world
Graphs are eating the world

Source: Gartner (October 2014)
Graphs are eating the world

Source: Gartner (October 2014)
What is Structr?
What is Structr?

Rapid Application Development Tool
What is Structr?

Rapid Application Development Tool

JSON Document Database
What is Structr?

- Rapid Application Development Tool
- JSON Document Database
- Content Management System
What is Structr?

Rapid Application Development Tool

Content Management System

Graph Editor and Viz Tool

JSON Document Database
Rapid Application Development
JSON Document Database

```
axel@dev2 ~$ curl -X USER:admin -X PASSWORD:admin http://0.0.0.0:8002/structr/rest/users/default
{
  "query time": "0.0020003623",
  "result count": 2,
  "result": [
    {
      "name": "admin",
      "eMail": "admin@localhost",
      "age": 42,
      "isAwesome": true,
      "dateOfBirth": "2014-10-09T15:15:28+0200",
      "groups": []
    },
    {
      "name": "test",
      "eMail": null,
      "age": null,
      "isAwesome": false,
      "dateOfBirth": null,
      "groups": [
        "1bbaee00099423dbb95ebba73ea53a9"
      ]
    }
  ],
  "serialization time": "0.000523227"
}
```
Welcome to Structr!

Congratulations, you have successfully set up your new Structr instance. This is a demo page to help you get started. You can edit and change everything on this page, just click anywhere on the text to start editing. You can explore Structr’s advanced features by looking at the examples below.

Note: You should view this in the Structr UI backend to be able to follow the tutorial. The default username/password is admin/admin. Go here and click on the “Welcome” tab at the top of the page.
Graph Editor and Visualisation
**Structr is all of this:**

- **Rapid Application Development Tool**
- **Content Management System**
- **JSON Document Database**
- **Graph Editor and Viz Tool**

---

Welcome to Structr!
(Welcome message and interface details)

```json
{...
  "name": "test",
  "email": "test@test.com",
  "title": "Developer",
  "department": "Engineering",
  "photo": "https://example.com/test.png",
  "serialization_time": "2021-03-15T10:25:00.000Z"
}
```
What can you do with it?
Use Case: Conference Tool
Requirements

Analyze conference data

Collect votes

Backend for mobile apps

Self-service for speakers and track hosts
Use Case: Conference Tool
Use Case: Conference Tool
Use Case: Conference Tool

**Best Speakers**

Consider only sessions after [10/01/2014](https://speakerbrain.gotocon.com/scores?start_date=1412114400000)

You can enter a custom formula to calculate a score the sessions will be sorted by, using the following parameters:

- **a**: Number of counted attendees
- **g**: Green votes
- **y**: Yellow votes
- **r**: Red votes

Score formula: \[ f(a,g,y,r) = (3g + 2y + r) / (g + y + r) \]

<table>
<thead>
<tr>
<th>Title</th>
<th>Speakers</th>
<th>Attendees</th>
<th>Rating</th>
<th>Score</th>
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<tbody>
<tr>
<td>Opening Keynote: Software…</td>
<td>Martin Fowler</td>
<td>296</td>
<td></td>
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<tr>
<td>Simple Scalability - …</td>
<td>Colin Humphreys</td>
<td>106</td>
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<td>Segways, Pandas &amp; Fitness…</td>
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<td>Craftsmanship over Hype</td>
<td>Enrique Comba Riepenhausen</td>
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<tr>
<td>Make Sense of your Logs: From…</td>
<td>Britta Weber</td>
<td>71</td>
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<td>Writing highly Concurrent…</td>
<td>Tim Fox</td>
<td>67</td>
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<td>Segways, Pandas &amp; Fitness…</td>
<td>Preben Thora, Janne Jul Jensen</td>
<td>61</td>
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<tr>
<td>Aaron: The Next Generation in…</td>
<td>Martin Thompson</td>
<td>58</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Use Case: Travel Website
Use Case: Travel Website
Highlights

Image database (> 80k images)

2,500 hotel fact-sheets

Neo4j Spatial for maps and geo-search

Booking interface (Expedia)
Use Case: Recommendations
Use Case: Recommendations
Highlights

Real-time! (50-100 ms for 1,000 products)

Character-based product recommendations

Gamified UI

Logging & Analytics
Structr's Roadmap

CMS modules & simplified UI
GitHub integration
Improved graph editor & visualisation
Neo4j 2.2 (enhanced performance)
Info

Project website: http://structr.org
Snapshots & libraries: Maven Central
Current version: 1.1-SNAPSHOT (stable: 1.0)
Twitter: @structr
Questions?
Please evaluate this talk via the mobile app!

Engage
Thank You!