A as in Audio: Facilitating the Automatic Generation of Audio Lectures

presented by
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New York, USA
Questions?

- (will be available during the presentation...hopefully)
Where is Bulgaria?
Sofia University ("Now and Then")

• Oldest university in Bulgaria

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Faculty of Mathematics and Informatics

- Best place to learn Software Engineering and Computer Science in Bulgaria (according to the national rating system*)
Initial hypothesis

We can use auto-generated audio lectures in both university and workplace settings
Live Demo
Summary

• Using audio lectures
• Problem?
  • Not searchable
  • Expensive production
    (time consuming)
  • Hard to edit and update
    only parts of audio lecture

“...one picture is worth a thousand words”.
Fred R. Barnard.

Milen Petrov, milenp@fmi.uni-sofia.bg

“A as in Audio”, 16.06.2016, ICELW2016, New York, USA
Single vs. Multiple Tiers

- Can be used anywhere and anytime,
- Can be used Offline
- You can use it in hands free mode (parallel tasks like driving, etc.),

Users share same data, but keeps local data.

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“A as in Audio”, 16.06.2016, ICELW2016, New York, USA
Background

- Web architecture is very important
  - Separate usage by number of clients
  - Separate by number of servers

<table>
<thead>
<tr>
<th>Single server/single database</th>
<th>Single client</th>
<th>Different clients</th>
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<tbody>
<tr>
<td>Traditional client-server</td>
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<td>Traditional client-server</td>
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<td>Multiple server (single database)</td>
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<td>Multiple server (Multiple database)</td>
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Features of software

- Roles:
  - Guest user
  - Authenticated user
Results

• Designed architecture and initial hypothesis is proved

Anomalies observed? (solution is on the way)
Conclusion

• Nevertheless some anomalies are observed solution is first step toward working software for audio-lecture generation
• Developed architecture is general and can be used in many other areas in web engineering projects, and not only for audio generation
What next?

- Already ongoing research

- explore possibilities
- analys, design, development and testing of supplement software tools and software services
Q&A?

Coming to Bulgaria? drop me an email

• milenp@fmi.uni-sofia.bg
Thank you for your attention!
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