Berserker Chat Design and Implementation Report

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ABSTRACT
Provide a concise summary of the design of the application

1. AIM OF APPLICATION

- What is the purpose of the application?

- Eg. The application is an academic search engine called AcaSe and is it is based upon the PuppyIR Framework[3], which has been used to construct other such services[2, 1]. The main purpose of this web application is to provide a customized interface to services such as Google Scholar and MS Academic Search.

- What are the assumptions about the aims and objectives?

- Describe the design goals and objectives of the application.

- What are the constraints of the project?

- Functionality List: i.e. what is the required and desired functionality?

- Reflective Questions:

- Is the scope of the application appropriate?

- Are the design goals realistic/achievable?

- How complex is the application?

- Is distribution across the web appropriate?

2. CLIENT INTERFACE

- Draw a wireframe of the user interface

- this may require several wireframes depending on the complexity of the application and the interfaces

- Describe the user interface.

- i.e. Label key input and output components: describe them.

- Provide a Walkthrough and explain the user interactions with application.

- i.e. use cases

- Describe the interactions associated with the dynamic components on the user interface.

- What calls are required to dynamically update the data on the client side?

- How does the user interface help the user achieve their goal, or complete their task?

- Is the user interface intuitive, appealing, usable, etc?

- What technologies are used on the client side?

- What are the reasons for your choices? i.e. what is the advantages and disadvantages of using this technology?

- What other options are there?

3. APPLICATION ARCHITECTURE

- N-Tier Architecture Diagram

- i.e. data flow diagram between the interface/client, middle ware, and backend services/data repos

- Describe the data model i.e. what data needs to be stored or persisted by the application?

- What are the relationships within the data model.

- i.e. use ER diagram and explain.

- Describe the backend services used (if any).

- Reflective Questions:

- How have you ensured that there is a separation of concerns?

- What other technology could have been used instead of django?

- What are the advantages of using a Web Application Framework over other technology?

- And, what are the disadvantages?

4. MESSAGE PARSING

- On the architecture diagram, Identify and label the main messages that will be parsed through the application.

- or alternatively (and preferably) include sequence diagrams to denote the sequence of communications parse between clients and servers.

- Describe the messages that are parsed back and forth through the application.

- For the main transactions - describe the payload of the messages

- i.e. What are the contents of the messages? i.e. include sample XML, XHTML, JSON, etc of one or two messages.

- What is the format of the messages?

- Why this format?

- What other formats could be used, what are the advantages and disadvantages of these other formats?

5. IMPLEMENTATION NOTES

- Views - What are the main views that you have implemented and what do they do?

- URL Mapping Schema - what is your URL mapping and schema?

- External Services - what external services does your application include and what handlers did you include?

- Functionality Checklist (which functionality is completed)

- Known Issues (what kind of works, what kind of errors to do you get)

- What technologies have been used and are required for the application. Include a list or table of all the technologies, standards, and protocols that will be required.

6. REFLECTIVE SUMMARY

For the Implementation Report Only:

- What have you learnt through the process of development?

- How did the application of frameworks help or hinder your progress?

- What problems did you encounter?

- What were your major achievements?

7. SUMMARY AND FUTURE WORK

- Summary of application and its current state.

- Include a list or table of all the technologies, standards, and protocols that will be required.

- What are the limitations?

- Plans for future development

8. ACKNOWLEDGEMENTS

9. REFERENCES

[1] D. Elliott, R. Glassey, T. Polajnar, and L. Azzopardi. Finding and filtering information for children. In *Proceedings of the 33rd International ACM SIGIR conference on Research and development in Information Retrieval*, page 702, 2010.

[2] R. Glassey, D. Elliott, T. Polajnar, and L. Azzopardi. Interaction-based information filtering for children. In *Proceedings of the third symposium of Information Interaction in Context*, pages 329–334, 2010.

[3] R. Glassey, T. Polajnar, and L. Azzopardi. PuppyIR Unleashed: A Framework for Building Child-Oriented Information Services. In *PuppyIR Unleashed: A Framework for Building Child-Oriented Information Services.*, 2011.