Kelsey Suyehira
Homework 1
CS 597 - Enterprise Web Development
BSU Fall 2015

1 Project Proposal

(a) **Project title?**
 "Search Engine for Children"

(b) **What is it going to do?**
 Based on previous research, it has been found that children prefer to use a popular search engine, such as Google Search, over one specifically built for them and do not gain much in using a search engine built specifically for children. However, children have difficulties in using popular search engines including: formulating queries, interpreting query suggestions, and analyzing returned results.

 This is the motivation for a research project proposed by Dr. Sole Pera. My goal in building this website for class is to create a framework with which the proposed project can be built. Because of time constraints, I will not be able to implement all three parts that are the focus of the research project. Instead, I plan to plug-in already made tools to start off with a working website. I hope to design the website so that it is easy to switch out parts once more research is done and new features are created.

 The other main part will be to collect data from those who use the website in order to build a benchmark dataset that can be used within this field of information retrieval for children. Therefore, a main feature of this website will be collecting and storing user data as well as creating an interface to that data for authorized users.

(c) **Who is the target audience?**
 Children, Teachers/Educators, Parents of young children

(d) **What sort of data will it manage?**
 The main data would be text to process, such as queries, as well as links and logging data. One of the main goals of this project is to collect data from users in order to create a benchmark dataset. Therefore, I will need to collect and organize data such as queries, session information, click data, as well as time in between links.

Other data may include an index, tf-idf or cosine similarity scores, or links/websites crawled. May also create surveys for research purposes that could be stored/processed through the website.

(e) **What web technologies will it use?**
PHP Laravel for the framework. Apache Lucene, Solr, and/or Hutch for indexing and crawling websites. Google Search API. MySQL database and/or Elasticsearch for a few things?

(f) **Stretch Goals?**
I also want to include logging and built in surveys in order to retrieve user feedback. Another helpful feature would be the ability to download certain data for authorized users.

2 Category Requirements

(a) Is it a website?
Yes. I would like to gain experience with AWS so I might try and host there.

(b) Is it a developer tool, library, or framework?
No

(c) Will it be proprietary to your current employer?
No

(d) Is it a browser plugin?
No

(e) Is it a game?
No

(f) Is it an API?
No