**Introduction**

This project aims to create a searchable database of resources, contests, and other such content. The database will be aimed at gifted children but be available for the general public. It shall contain resources for many subjects such as math, science, public speaking, and history.

**System Overview**

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**Design**

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**Functional Requirements:**

* The database will have filters on the search functionality, such as age, grade, and geolocation.
* The database will be hosted on the web
* The database will start returning results within 5 seconds.
* Updates to the database will not cause significant lag to the UI
* The database will be easy to update
* The database will include information about topics such as math, science, public speaking, and history
* The database will have AI-integration as a paid feature
* The database will be lightweight enough that a high-end non-server computer should be able to handle at least 100,000 users at any time.

**Non-Functional Requirements:**

* The database should be screen scraper resistant.
* IF accounts are added the database and the personal information of the users should be protected by enough security that only 1% of attacks are successful in any way

**External Interface Requirements**

* The database will use a MySQL database to store data about contests.

**Limitations:**

* The dedicated system we use should not cost more than $5000.
* The project should be easily maintainable by one person spending at most one hour a day (i.e. it should mostly update its own database through research)

**System Architecture**

The database will be implemented in python,

**User Interface**

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**Detailed Design**

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