

TNSDC- GENERATIVE AI FOR ENGINEERING FINAL PROJECT

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PROJECT TITLE

**RANDOM FACT
GENERATOR**

AGENDA

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PROBLEM STATEMENT

Develop a tool that generates random, engaging facts suitable for inclusion in PowerPoint presentations. The tool should offer a streamlined process for accessing diverse and accurate facts on various topics, enhancing the quality and interest level of presentations.

Random Fact Generation: Generate random facts across different topics such as science, history, technology, etc., ensuring each fact is informative and engaging.



PROJECT OVERVIEW

- ❑ **Random Fact Generation:** Generate informative facts across different categories like science, history, and technology.
- ❑ **Seamless Integration:** Enable easy insertion of generated facts into PowerPoint presentations.
- ❑ **Customization Options:** Allow users to customize the types of facts based on presentation themes or audience preferences.
- ❑ **Reliable Sourcing:** Ensure facts are sourced from credible sources for accuracy and reliability.
- ❑ **User-Friendly Interface:** Design an intuitive interface for quick and easy fact generation..



WHO ARE THE END USERS?

- ❑ **Students:** Students of all levels, from elementary to higher education, could use the Random Fact Generator for research projects, presentations
- ❑ **Teachers and Educators:** Teachers may use the Random Fact Generator to supplement their lesson plans with interesting facts or trivia to engage students and make learning more interactive..
- ❑ **Professionals:** Professionals in various fields such as public speaking, training, or marketing might use the Random Fact Generator to add engaging content to their presentations or speeches.
- ❑ **Learners and Hobbyists:** Individuals who have a curiosity for learning and enjoy exploring new facts may use the Random Fact Generator for personal enrichment and entertainment.

YOUR SOLUTION AND ITS VALUE PROPOSITION

- ❑ **Diverse and Engaging Content:** Our Random Fact Generator offers a wide range of facts spanning multiple categories such as science, history, technology, and more. Users can discover fascinating tidbits of information that are both educational and entertaining.
- ❑ **Enhanced Learning Experience:** Whether you're a student conducting research, a teacher preparing lesson plans, or a curious individual seeking knowledge, our generator enriches the learning experience by providing quick access to valuable information on diverse subjects.
- ❑ **Time-saving Convenience:** With our tool seamlessly integrated into your workflow, you can effortlessly generate random facts with just a few clicks. Say goodbye to time-consuming searches for interesting content – our generator delivers instant results, saving you valuable time and effort.
- ❑ **Customization Options:** Tailor your fact-finding experience to your preferences with our customization features. Choose specific categories or topics of interest, adjust the frequency of fact generation, and explore personalized recommendations based on your preferences.



THE WOW IN YOUR SOLUTION

- ❑ **Randomization:** The tool should have the ability to randomly select facts from a database.
- ❑ **Variety of Topics:** It should cover a wide range of topics to suit different presentation themes and subjects
- ❑ **Conciseness:** Generated facts should be succinct and easily digestible
- ❑ **Relevance and Accuracy:** Facts presented should be accurate, verified, and relevant to the chosen topic
- ❑ **Customization Options:** Users should have the option to specify preferences or filters, such as preferred topics



MODELLING

User Interface (UI):

Design an intuitive and user-friendly interface for the application.

Include options for users to specify preferences such as topic selection, keyword filters, and citation inclusion.

Data Management:

Create a database or repository of facts covering a wide range of topics.

Each fact should be associated with metadata including topic tags, source information, and optional citations.

Randomization Algorithm:

Develop an algorithm to randomly select facts from the database.

Ensure that the algorithm considers user preferences and filters, if specified.

Integration with PowerPoint:

Implement functionality to seamlessly integrate generated facts into PowerPoint presentations.

Provide options for users to choose the slide layout and positioning of the fact within their presentation.

Citation Management:

If users opt to include citations, implement a feature to automatically generate or input citation information for each fact.

Provide flexibility for users to customize citation styles or formats.

Error Handling and Validation:

Implement error handling mechanisms to address issues such as database connectivity errors, invalid user inputs, or unexpected system behavior.

Validate user inputs to ensure they meet required criteria and prevent potential errors.

RESULTS

Improved Presentation Quality: Incorporating random facts adds depth and interest to presentations, leading to higher-quality presentations that are more engaging and informative.

Positive Audience Reception: Audiences are likely to respond positively to presentations that include engaging facts, leading to increased attention and retention of information.

Ease of Use: The user-friendly interface and seamless integration with PowerPoint make the tool easy to use for presenters of all skill levels.

Scalability: The system's scalability allows for the addition of new facts and updates, ensuring that the tool remains relevant and useful over time.

Feedback Mechanisms: Implementing feedback mechanisms allows users to provide input on the tool's performance

Enhanced Credibility: The inclusion of citations ensures that the facts presented are backed by credible sources, enhancing the overall credibility of the presentation.

Customization Options: Users have the flexibility to customize the generated facts based on their preferences and the specific requirements of their presentations. This customization capability increases the versatility of the tool.

OUTPUT

```
Enter a category (History, Science, Miscellaneous), or leave blank for all categories: History
Enter the number of facts you want: 3
```

Random Facts:

```
Fact 1: The first email was sent in 1971.
Fact 2: The shortest war in history lasted only 38 minutes.
Fact 3: The Great Wall of China is visible from space.
```

```
Enter a category (History, Science, Miscellaneous), or leave blank for all categories: Science
Enter the number of facts you want: 2
```

Random Facts:

```
Fact 1: Honey never spoils.
Fact 2: The human brain contains about 86 billion neurons.
```

```
Enter a category (History, Science, Miscellaneous), or leave blank for all categories: Miscellaneous
Enter the number of facts you want: 3
```

Random Facts:

```
Fact 1: The first computer virus was created in 1983.
Fact 2: The Eiffel Tower can be 15 cm taller during the summer.
Fact 3: A group of flamingos is called a 'flamboyance'.
```

```
Enter a category (History, Science, Miscellaneous), or leave blank for all categories: Physics
Enter the number of facts you want: 4
Invalid category. Please choose from History, Science, or Miscellaneous.
```

DEMO LINK:

<https://github.com/Vallikandan61/TNSDC-GENERATIVE-AI>