**MythBusters Project Definition Document**

## Summary

The **MythBusters Project** is an engaging web application designed to educate the public, particularly children, about common health misconceptions. It transforms potentially dry educational content into an interactive and enjoyable experience by gamifying the learning process. This approach not only makes debunking myths fun and highly instructive but also actively combats the spread of misinformation. While primarily aimed at children, the app's intriguing content also captivates adults.

The application features three distinct games and a set of flashcards. The concept of these games is to identify correct or incorrect information presented in the question or to choose the correct option among the given choices to earn points. Each game offers varying difficulty levels, allowing users to earn points and in-game currency that are accumulated in their accounts. Users can compete with others on leaderboards for each game, fostering a sense of friendly rivalry. The accumulated in-game currency can then be used to purchase unique avatars, enabling users to customize their in-game characters and enhance their personalized experience.

## Objectives

Our primary objective for the **MythBusters Project** is to actively combat the spread of health misinformation by clearly demonstrating the falsehoods of commonly held beliefs and effectively teaching accurate health information. We aim to:

* **Educate and Correct Misconceptions:** Directly address and debunk prevalent health myths that are widely accepted as true within the general public.
* **Prevent Harm from Misinformation:** Mitigate the potential for harm that arises from the practical application and word-of-mouth dissemination of incorrect health information.
* **Increase Public Health Literacy:** Engage users through an interactive and entertaining game-based platform, capturing attention that might otherwise be missed in traditional educational settings or public service announcements.
* **Foster a More Informed Society:** Contribute to the development of a more health-conscious and knowledgeable community by providing accessible, accurate, and engaging educational content.
* **Implement Core Functionalities:** Develop and integrate the following key features:
  + Three distinct, interactive games with varying difficulty levels. That is based on identifying whether the information in a question is true or false, or selecting the correct option to earn points.
  + A comprehensive set of educational flashcards.
  + A robust user account system for tracking progress, points, and in-game currency.
  + A competitive leaderboard system to foster engagement among users.
  + A customizable avatar system allowing users to personalize their in-game characters using earned currency.

## Scope

There will be some inclusions and exclusions in the project as below:

### Inclusions:

* **Three distinct educational games:** These games will be designed with varying difficulty levels to cater to a broad audience.
* **Interactive flashcards:** A core component for quick learning and myth debunking.
* **User account system:** This will allow users to track their progress, accumulate points, and manage in-game currency.
* **Leaderboards:** A competitive feature to display user rankings based on game performance.
* **Avatar customization:** Users will be able to personalize their in-game characters using earned virtual currency.
* **Profile customization:** Users will be able to personalize their profile pictures. That also show up in leaderboards.
* **Health-related content:** All educational material will specifically pertain to common health myths and accurate health information.

### Exclusions:

* **Mobile native applications:** While the web application will be responsive, dedicated iOS or Android native apps are not within the current scope.
* **Advanced social networking features:** Features beyond leaderboards, such as direct messaging between users or friend lists, are not included.
* **User-generated content:** The platform will not support users submitting their own myths or content for inclusion. All content will be curated and developed by the project team.
* **Monetization beyond in-game currency:** The project will not include real-money transactions for in-game items or subscriptions.

## Target Audience

The **MythBusters Project** is primarily designed for **children aged 8-14**, given its gamified and interactive approach to learning. However, its engaging content and accessible format also make it highly suitable for **adults of all ages** who are interested in clarifying common health misconceptions and improving their general health literacy.

## Key Features

The **MythBusters Project** offers a robust set of core functionalities designed to engage users and facilitate effective learning:

1. **Multiple Interactive Games:** The application will feature at least three distinct game modes, each offering unique gameplay mechanics to make learning about health myths enjoyable and memorable.
2. **Educational Flashcards:** An intuitive flashcard system will provide bite-sized, accurate information to quickly debunk myths and reinforce correct health knowledge.
3. **User Account & Progression System:** Users will have personalized accounts to track their scores, earned in-game currency, and overall progress, encouraging continued engagement.
4. **Competitive Leaderboards:** Global and game-specific leaderboards will allow users to compare their scores with others, fostering a sense of competition and motivation.
5. **Customizable Avatars:** Users can personalize their in-game experience by purchasing unique avatars with accumulated in-game currency, enhancing their sense of ownership and fun.
6. **Varied Difficulty Levels:** Games will incorporate multiple difficulty settings, catering to different age groups and knowledge levels, ensuring a challenging yet accessible experience for all.

## Project Success Criteria

To determine the success of the **MythBusters Project**, we will measure against the following key criteria:

* **Feature Implementation & Functionality:** The project will be deemed successful upon the **full implementation and stable functionality of all six key features** outlined, including the three interactive games, flashcards, user account system, leaderboards, and avatar customization.

## Task Matrix

| **Task Description** | **Responsible Person(s)** | **Status** | **Notes** |
| --- | --- | --- | --- |
| Overall Document Coordination & Final Review | Batuhan Efe Alkış | Completed | Ensures consistency, quality, and readiness for submission. |
| Draft Project Summary | Doruk Demirci | Completed | Focused on problem, solution, and main purpose. |
| Outline Project Objectives | Gökçen Enli | Completed | Defined specific goals and target functionalities. |
| Define Project Scope (Inclusions/Exclusions) | Gökçen Enli | Completed | Ensured technical feasibility and clear boundaries. |
| Identify Target Audience | Buğra Işın | Completed | Clarified primary and secondary user groups. |
| List Key Features | Zeynep Yavuz | Completed | Collaborated on core functionalities to be implemented. |
| Establish Project Success Criteria | Zeynep Yavuz | Completed | Defined measurable criteria for project success. |
| Review for Clarity, Conciseness, & Professionalism and Format for Final Form | Batuhan Efe Alkış | Completed | Proofread for grammar, spelling, and overall readability. |