



TEAM POWESURGE
PRESENTS

DEV OR DIE 2K24

PROBLEM STATEMENTS

RULES

- You can use tech-stack of your choice.
- Use of CMS(like Joomla, WordPress) is not allowed.
- Use of GitHub is encouraged.
- Use of plugins is encouraged.
- Try to use APIs as much as possible.
- Partial projects will be considered for evaluation, but please try to complete your project.
- Simplicity and elegance are encouraged for front-end design.
- If the project work is found plagiarized, then it would lead to disqualification.
- The features mentioned are to guide you, you can add your own features and change existing ones as well.
- Creativity will be awarded more.
- The judging criteria will be:
 - Code Organization
 - Mobile Browser Compatibilty
 - Database Organisation

LONDON IS IN CHAOS.
PRICELESS DIAMONDS
VANISH FROM LOCKED
VAULTS AND SECURE STORES,
LEAVING NO TRACE.
INSPECTOR LESTRADE,
DESPERATE, TURNS TO
SHERLOCK HOLMES. "THEY
CALL HIM 'THE GHOST',
HOLMES," LESTRADE SAYS,
"A PHANTOM THIEF WHO
LEAVES NO CLUES, JUST A
TRAIL OF MISSING GEMS."
HOLMES, EYES GLINTING,
TURNS TO YOU. "CAN YOUR
CODING SKILLS HELP US
CATCH THIS GHOST, MY
FRIEND?" "



THE MIND MAP

While investigating the crime scene, Holmes meticulously gathers clues, from seemingly insignificant details like paint flecks on the floor to the faint scent of pipe tobacco in the air.

As he meets with various individuals related to the case, including museum staff, art critics, and potential witnesses, Holmes records their names, professions, and any relevant information they provide.

He also notes down any observations about their behavior, demeanor, and possible connections to the stolen artwork.



Challenge: Assist Sherlock Holmes by developing a web-based "Clue Tracker" to organize and analyze the growing mountain of information.

Basic Features:

- **Login/Signup**
- **Clue Organization:**
Add new clues with:
 - **Category:** Physical evidence, witness statement, observation, etc.
 - **Date Discovered:** Track the chronology of clues.
 - **Description:** Rich text editor for detailed descriptions and notes.
- **People Tracker:**
Create profiles for individuals involved in the case, including:
 - **Name:** Person's full name.
 - **Profession:** Their occupation or role.
 - **Details:** Notes and information gathered during interactions.



THE MIND MAP

Advance Features:

- **Dark Mode**
- **Timeline Visualization:**
Display a chronological timeline of events:
 - Theft discovery.
 - Interactions with individuals.
 - New clue discoveries.
- **Search:** Find specific clues by date.
- **Relationship Mapping:** Visually represent connections between individuals, highlighting potential networks or associations.



THE MIND MAP

GEMSTONE GOSSIP

Lestrade nods grimly. "Every strategy, Mr. Holmes, must be veiled in secrecy. We require a communication channel that defies interception."

Watson leans forward, concern etched on his face. "The stakes are high, Holmes. We need a **sanctuary for our discourse**, a secure haven for our communication.



Challenge: Assist Sherlock Holmes by developing a chat app. This app will be their **communication fortress**, shielding their messages from prying eyes and ensuring their investigation stays under wraps.

Basic Features:

- Secure Login:** Require strong passwords or two-factor authentication for secure user access.
- Message History:** Allow users to view past conversations within the app.
- Messaging Features:** Facilitate sending text messages, audio, and sharing files securely.
- Voice and Video Calls:** Allows user to make voice and video calls.



GEMSTONE GOSSIP

Advance Features:

- Disappearing Messages:** Implement a feature for messages to automatically delete themselves after a specific timeframe.
- Self-Destructing Files:** Allow users to send files that self-destruct after download, preventing unauthorized access or retrieval.
- Offline Messaging:** Allow users to send and receive messages even when offline, with delivery occurring upon re-establishing internet connection.
- Group Chats:** Facilitate secure communication within groups, enabling collaboration and information sharing between Holmes, Watson, and Lestrade.



GEMSTONE GOSSIP

SHERLOCK'S EYE

Recognizing the limitations of conventional investigative methods, Holmes devises a daring plan. He turns to you, his gaze sharp and focused. "You possess the tools, my friend, to weave this web of shadows. We require a platform, a digital haven shrouded in anonymity, where the whispers of the streets can be collected and analyzed."



Challenge: Assist Sherlock Holmes by developing a web-based platform. This platform should mirror the functionality of a popular social networking site, with a crucial twist: complete anonymity.

Basic Features:

- **Anonymous Accounts:** Users register and participate without revealing any personal information.
- **Information Sharing:** Users share observations, reports, and leads related to suspicious activity or individuals.
- **Simple Interface:** User-friendly design accessible to individuals with varying technological experience.
- **Anonymous Chat:** Facilitate secure and anonymous chat interactions between users to discuss observations and collaborate on leads.



SHERLOCK'S EYE

Advance Features:

- Reputation System:** Users anonymously "upvote" or "downvote" information credibility, filtering valuable leads from rumors.
- Sentiment Analysis :** Analyze the tone and sentiment of anonymous reports to gauge potential urgency or hidden biases.
- Post Sharing:** Allow users to anonymously share text posts and multimedia content (photos, videos) relevant to the investigation.



SHERLOCK'S EYE

HEALING HAND

A gunshot shattered the London night. Dr. Watson lay wounded, and the overwhelmed staff at St. Bartholomew's Hospital seemed lost in a sea of paperwork. Witnessing the inefficiency, a spark ignited in Sherlock Holmes' mind.



Challenge: The project a "Medicare App" aims to optimize emergency room processes at St. Bartholomew's Hospital.

Basic Features:

- Secure Login:** Doctors & patients access the app securely.
- Find Doctors:** Patients locate nearby doctors based on needs.
- Appointments:** Schedule in-person or online visits.
- Medical Records:** View & share medical history & reports.
- Communication:** Chat, call, or video conference with doctors.
- Doctor Notes:** Doctors track treatment progress with private notes.



HEALING HAND

Advance Features:

- **Lab Tests:** Schedule and access pathology tests directly from the app.
- **Show graphical representation for blood pressure, blood sugar levels**
- **Patients can give ratings and add reviews to a clinic or a doctor**
- **Analyze previous waiting time to predict the estimated time for consultation.**
- **Book ambulance to a nearby hospital:** Allow patients to request ambulance services directly through the app in case of emergencies



HEALING HAND

CRYPTIC CODE

A chilling telegram arrived, signed "Professor Moriarty." It read: "Game's on, Holmes. Solve the puzzle below to unlock the ghost's secrets. Fail, and things might get...spooky." A cryptic crossword puzzle accompanied the message. Sherlock knew Moriarty, his cunning nemesis, was behind this. The puzzle held the key to the robberies and the mysterious "ghost" mentioned in the telegram.



Challenge: Create a platform for Moriarity to help him generate a Crossword Puzzle for Sherlock Holmes.

Basic Features:

- **Login/Signup**
- **Crossword Generation:** The app utilizes a customizable engine to generate unique crossword puzzles of varying difficulty, allowing users to choose the level of challenge.
- **Themed Puzzles:** Users can select from pre-designed themed puzzles based on historical periods, literature, or even specific investigations undertaken by Sherlock Holmes.
- **Community Forum:** The app features a forum where users can discuss puzzle solutions, share strategies.
- Crossword sharing using link and passwords.
- Timer to keep track of time during solving.



CRYPTIC CODE

Advance Features:

- Users can sign up using Google, Facebook, etc.
- **Captcha Verification:** Captcha verification before crossword submission to avoid bot activity.
- **Contest Creation:** Allows user to create contest which can be attempted by multiple contestants.
- Create customize crossword and puzzles



CRYPTIC CODE

THE CASE FILES

As the dust settles, I, Dr. John Watson, feel compelled to share this extraordinary story with the world. Many of you have undoubtedly heard whispers of Sherlock Holmes, the consulting detective whose brilliance has unraveled countless mysteries. But for those who haven't had the privilege of witnessing his methods firsthand, I feel a responsibility to chronicle our adventures, not just for the thrill of the chase, but for the lessons these experiences hold.



Challenge: Help Dr Watson narrate the brilliance of Sherlock Holmes, by creating a "Blog Website".

Basic Features:

- **User Registration and Login and Basic User Profile**
- **Blog Creation:** Provides tools and templates for users to create and publish their own blog posts.
- **Content Editing:** Enables users to edit and format their blog posts with basic text formatting options and image upload functionality.
- **Comment Section**
- **Search Functionality:** Enables users to search for specific content across various blogs based on keywords and filters.
- **Following System:** Allows users to follow other bloggers whose content they find interesting, creating personalized feeds.



THE CASE FILES

Advance Features:

- Content Categorization:** Enables users to categorize their blogs under specific themes (e.g., true crime, fictional detective, etc.) for better organization and discovery.
- Advanced Customization:** Offers a wider range of themes, layouts, and color schemes for users to personalize their blogs.
- Analytics Tools:** Provides basic analytics for blog owners, such as number of views, comments, and user demographics.
- Moderation Tools:** Allows designated users to moderate comments and maintain a safe and respectful online environment.
- Social Media Integration:** Allows users to share their blog posts and engage with the community through popular social media platforms.



THE CASE FILES

PUZZLE CHAMBER

Professor Mycroft sent an urgent message: a hacker breached the Academy's security, leaving cryptic clues and puzzles. He proposes a digital challenge platform, similar to HackerRank, to attract the hacker and skilled individuals to solve the puzzles and unmask the culprit. Intrigued by the unconventional approach, Sherlock joined forces with Mycroft to create "The Deduction Chamber," hoping to solve the case through the collective intelligence of the online community.



Challenge: Help Mycroft develop a online test platform similar to "HackerRank" to help recruit new candidates in Scotland Yard.

Basic Features:

- **User Registration and Login:** Allows individuals to create accounts using aliases or usernames for anonymity.
- **Challenge Categories:** Offers diverse challenges categorized by difficulty level and skill set (e.g., logic puzzles, cryptography, codebreaking).
- **Leaderboard System:** Tracks user performance on a global leaderboard, fostering a sense of competition and motivation.
- **Public Forum:** Provides a space for users to discuss challenges, share strategies, and seek help from the community.
- **Challenge Submission System:** Enables users to contribute their own original challenges to the platform, enriching the overall experience.
- **Basic Analytics:** Provides users with basic insights into their performance, such as attempted challenges, solved challenges, and average completion time.



PUZZLE CHAMBER

Advance Features:

- Challenge Ranking System:** Implements a more nuanced ranking system that goes beyond points, incorporating factors like time taken and number of attempts.
- Team Formation and Management:** Allows users to create and join teams, collaborate on challenges, and track their team's performance.
- Private Messaging System**
- Advanced Analytics:** Provides users with detailed performance breakdowns, including areas of strength and weakness, and personalized learning recommendations.
- Gamification Elements:** Incorporates game-like elements such as badges, achievements, and virtual rewards to increase user engagement and motivation.
- Challenge Creation Tools:** Enables experienced users and instructors to create their own custom challenges and quizzes, enriching the platform's content library.



PUZZLE CHAMBER

HAVE ANY NEW IDEA
DIFFERENT THAN THESE FEEL
FREE TO WORK ON IT,
SHERLOCK NEEDS ALL THE
HELP HE CAN GET!

