

W E B S T E R

PROBLEMS



STATE(S)EYTS

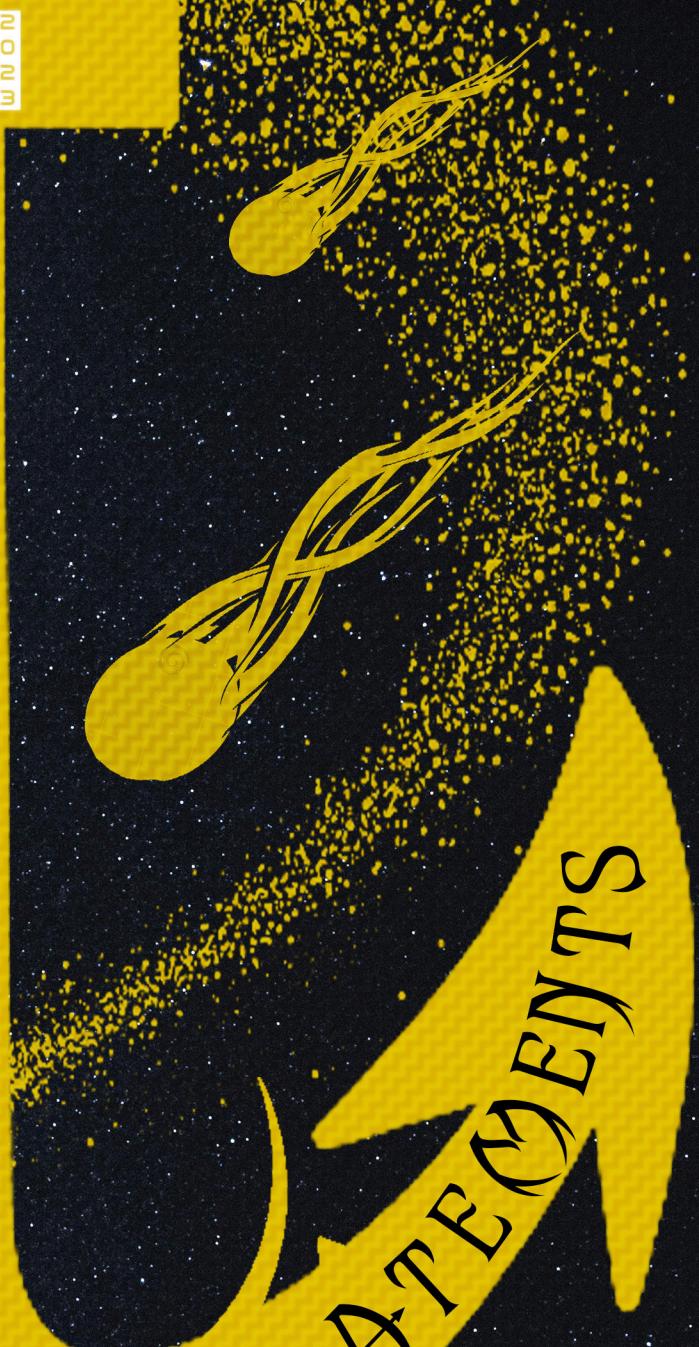


TABLE OF CONTENT

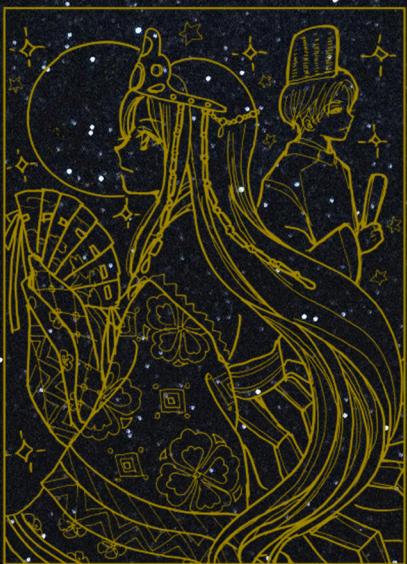
- 👉 Rules and Regulations
- 👉 Kaguya's Moonlit Scroll
- 👉 Tanabata Typing
- 👉 Atlas Codex
- 👉 Yggdrasil's Chronicles
- 👉 Thoth's Stellar Ledger
- 👉 Apollo's Oracle
- 👉 Imperial Mess Relay
- 👉 Bebop Professionals
- 👉 Mars Doodle
- 👉 Odyssey Plan

ROLES AND REGULATIONS

- You can use any language of your choice.
- Use of CMS (like Joomla, WordPress, etc.) is not allowed.
- Use of GitHub is also encouraged.
- Use of plugins is encouraged.
- Use of templates is not allowed.
- Please try to use APIs as much as possible.
- You can make the project in teams (of max 3 members), with atleast one member of CSE/IT.
- Partial projects will also be considered for evaluation, but please try to complete the project as much as possible.
- Team members CANNOT be from the different year.
- Simplicity and elegance are encouraged for front-end design.
- The judging criteria will be:
 1. Maximum focus on backend design
 2. Code organization
 3. Database organization
 4. Scalability of the project
 5. Mobile Browser Compatibility
 6. Documentation (proper comments)
- The use of libraries such as Bootstrap and jQuery are encouraged.
- If the project work is found to be plagiarized, then it would lead to immediate disqualification.
- These features are just to guide you regarding building final product. You can add your own features and change existing ones as well.
- Creativity will be awarded more.

KAGUYA'S MOONLIT SCROLL

DIFFICULTY: EASY



In the enchanting world of Japanese folklore, Princess Kaguya, a radiant celestial being, held a deep connection to the moon. She relied on the 'Moonlit Scroll' to manage her ethereal tasks.

Your mission, noble web developers, is to create 'Kaguya's Tasks,' a To-Do List App inspired by the grace and purpose of Princess Kaguya. This app will empower users to organise their daily tasks through to-dos just like Princess Kaguya. The success of 'Kaguya's Tasks' will offer users a bridge to the mystical world of Japanese folklore, enabling them to manage their tasks with elegance and purpose, much like Princess Kaguya herself. Will you embrace this mission and create a To-Do List App that connects modern task managers to the ethereal realm of Princess Kaguya's stories?



BASIC

1. Login/SignUp (Email, password)
2. Create/Update/Delete todos
3. Notes have title and description
4. Tags/Labels for each task
5. Optional Deadline for each task
6. Priority of each
7. Reminders for Each task
 - a. Email reminder
 - b. Desktop notifications
8. Minimalistic Clean UI/UX
9. Draggable tasks
10. Sort task based on
 - a. Dates added (inc/dec)
 - b. Priority wise
 - c. Deadline wise
 - d. Manual order (drag to reorder)

ADVANCED

1. Login/SignUp from Google, facebook, github etc
2. Markdown support
3. In todo description, support for checkboxes
4. Canvas drawing support
5. Image in todos

DIFFICULTY: EASY



TANABATA TAPING

In the celestial realm of Japanese folklore, Hikoboshi and Orihime, the Weaver Princess, share a love that transcends the Milky Way. They can only meet once a year during the Tanabata festival.

Your mission, nimble-fingered web developers, is to create 'Tanabata Typing,' a web app that tests users' typing speed and accuracy by having them type love letters exchanged by the celestial lovers. The faster and more accurately they type, the closer they bring Hikoboshi and Orihime together, much like the stars do during the festival.



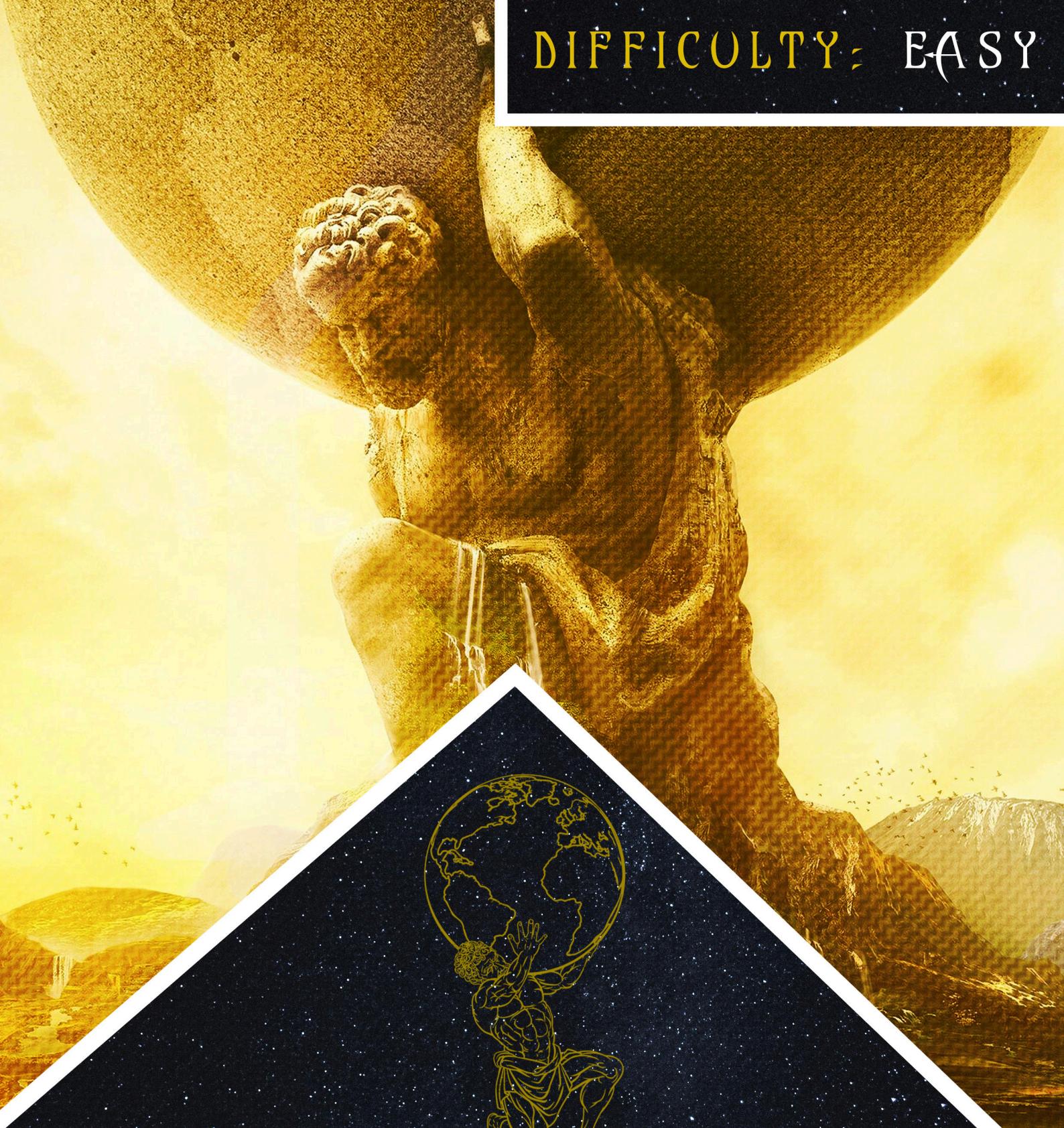
BASIC

1. Login/SignUp
2. Guest mode (users without login)
3. Minimalistic Clean UI/UX
4. Friend requests
5. Measure typing stats
 - a. Speed (wpm)
 - b. Time
 - c. Eros
 - d. Accuracy
6. Have a feature for custom typing lessons and preloaded lessons
7. Practise on a custom random text (generated differently each time).
8. User should be able to set the time and/or length
9. User can select type of text
 - a. Only alphabets
 - b. Punctuations and numbers (enabled/disabled)
10. Leaderboard (think of a scoring and ranking algorithms based on all the stats)
 - a. All time
 - b. Weekly
 - c. Daily
 - d. friends
11. Make leaderboard

ADVANCED

1. Login/SignUp from Google, facebook, github etc
2. Dictation audio exercises
3. Challenge multiple people at same time
(and show result board)
 - a. Invite friends
 - b. Find randoms
 - c. Invite recently played people
4. Different types of keyboards
5. Support for multiple languages

DIFFICULTY: EASY



ATLAS CODEX





In the world of Greek mythology, the stars shone as divine sparks, and the Titan Atlas bore the celestial spheres on his mighty shoulders. Atop Atlas's shoulders lay the 'Atlas Codex,' an ancient tome holding the universe's secrets.

Your task, innovative web developers, is to craft 'Atlas Codex,' a Space Exploration Website. Users will embark on a cosmic odyssey, navigating the digital pages of the Atlas Codex to explore the cosmos, its wonders, and the legendary tales of space voyages. The destiny of 'Atlas Codex' lies in your hands as you endeavour to forge a digital sanctuary connecting contemporary space enthusiasts to the ancient celestial myths. Will you take up the challenge and give life to 'Atlas Codex,' a Space Exploration Website guiding users through the awe-inspiring wonders of space?

BASIC

1. Create a web-based dashboard that displays real-time data from various space missions, including information about the International Space Station (ISS), Mars rovers, and more.
2. Users should be able to interact with and explore this data.
3. It should contain history of space related important events.
4. The website must contain animations and you may use animation libraries like gsap
5. It also offers interactive lessons, quizzes, and allow users to learn about celestial objects and phenomena.
6. Have a page to display space related news and updates.
7. Allow users to follow news from different space agencies.
(You can use APIs of different space agencies to fetch relevant data)

ADVANCED

1. You can scrape data from different publicly available archives.

DIFFICULTY: EASY



YGGDRASIL'S CHRONICLES

In the mystical realm of Norse mythology, Yggdrasil, the World Tree, united the nine realms of existence. Odin's ravens, Muninn and Huginn, perched upon its branches, gathering cosmic knowledge.

Your mission, valiant web developers, is to create 'Yggdrasil's Chronicles,' a blog application. Users will embark on an interdimensional journey through the realms of Norse mythology, sharing their cosmic stories, and expanding the collective knowledge of Yggdrasil. Will you embrace this epic quest and create a digital portal connecting modern knowledge seekers to the ancient world of Norse myth?



BAASIC

For space news space blog etc

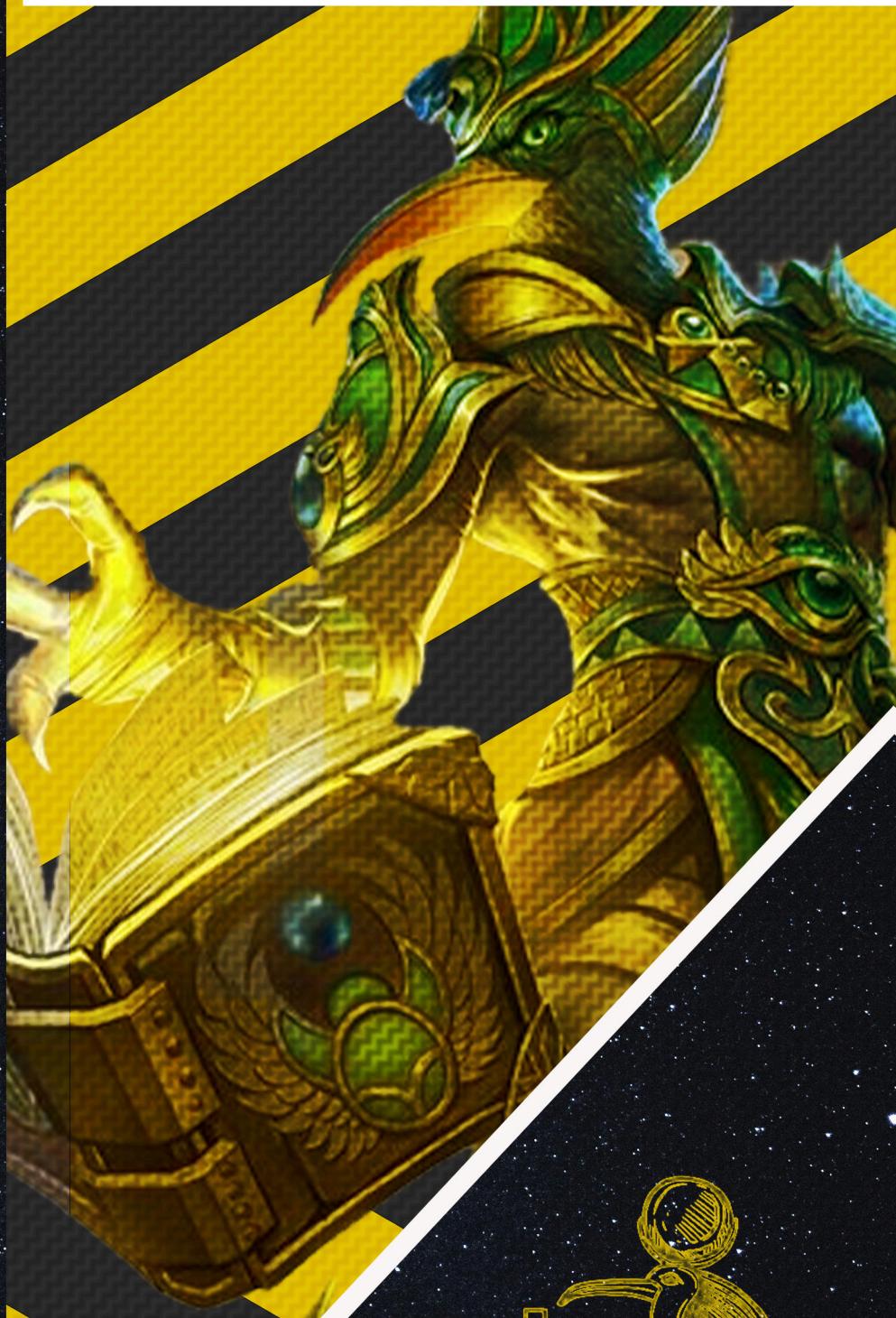
1. Guest
2. Login/signup
3. Create / Update / Delete blogs
4. Tag users
5. Likes and comments and reposts
6. Images/audio/video in blogs
7. Preview blogs before posting
8. Follow users/spaces
9. Ability to create a space (like a group) and invite/add members
10. A user can be part of multiple space
11. Spaces can have admins
12. A user can request to join a space
13. Spaces can have different roles
 - a. Owner (only he/she can make moderators)
 - b. Moderator (can delete a post, ban users)
 - c. Member (view and write access)

ADVANCED

1. Login/SignUp from Google,facebook etc
2. Recommend blogs based on their likes and view history [ml or your custom algo]
3. Ability to embed videos from other sites
4. Markdown support

THOR'S STELLAR SLEDGE

DIFFICULTY: MEDIUM





In the realm of ancient Egyptian mythology, the night sky was adorned with countless stars, each believed to be a manifestation of deities, including the divine figure Thoth, the god of wisdom, writing, and accounting. It was said that Thoth kept a ledger known as the 'Stellar Ledger,' meticulously recording the financial transactions of the cosmos.

Your mission, resourceful web developers, is to create 'Thoth's Stellar Ledger,' an Expense Tracking Application inspired by the wisdom of Egyptian mythology. Users will embark on a financial journey, managing their expenses in the spirit of Thoth's meticulous record-keeping. Will you accept the challenge and design 'Thoth's Stellar Ledger,' a digital ledger that bridges modern financial management with the enduring wisdom of Egyptian mythology?

BASIC

1. Login/Signup
2. Record daily transactions
3. Multiple expense categories like food, shopping, gift etc
4. Easy to read and visualize expense reports
5. Multiple themes (dark mode, other themes)
6. Get notified of recurring bills and transactions before due date
7. Keep track of savings to meet your financial goals
8. Add friends
9. Make groups
10. Add split expenses in groups or with friends
11. Send a reminder of due money
12. Simplify debts in a group
13. Ask approval from the receiver before settling up
14. Ability to view daily, weekly, monthly and annual expenses (use charts and graphs)

ADVANCED

1. Login with google
2. All currencies support with realtime exchange rates conversions
3. Visualize your cryptos/stocks (a user can add which stock / crypto he wants to track)
4. Export feature of expense report
5. Vault to store expense receipts

APOLLO ORACLE



DIFÍCIL Y EDÍO



In the ancient and mystical world of Greek Mythology, the temple of Apollo served as a place of divine wisdom and prophetic insight. It was here that Apollo, the radiant Sun God, imparted knowledge and foresight through the oracle priestess.

Your mission, brave web developers, is to create 'Apollo's Oracle,' a Quiz App inspired by the profound wisdom of the Oracle of Delphi. This app will serve as a modern-day equivalent to the ancient temple, allowing users to engage in quizzes that challenge their knowledge and wisdom, just as Apollo did through the oracle priestess. The success of 'Apollo's Oracle' will unlock the gates to the repository of knowledge, offering users the opportunity to test their intellect and gain insights, much like the seekers who visited the Oracle of Delphi. Will you accept this mission and develop a Quiz App that connects modern knowledge seekers to the timeless wisdom of the Oracle of Delphi, guided by the radiant Apollo, the Sun God?

BASIC

1. Login/SignUp based on different user roles
 - a. Student - taking the quiz
 - b. Admin - creating the quiz
2. Create and manage quizzes
3. Multiple quiz types
 - a. MCQ
 - b. Short Answer
 - c. T/F
 - d. Long answer/subjective with word limits/character limits
4. Implement quiz window(students can only start quiz within that window)
5. Timed quizzes
6. Timed sections/questions in quiz
7. Autosave progress
8. Share quiz link
9. Preset answers
10. Manage result showcase (real-time or view after finishing)
11. Allow admin to decide, ki result kisko dikhega
12. Quiz scoring and detailed report
13. Leaderboard and ranking of results
14. Admin panel for all settings management

ADVANCED

1. Login/SignUp from Google, Facebook, github etc
2. Export quiz to question paper and answer sheet
3. Proctoring - Moderation using camera, screenshot saves and validation
4. Import question, answers to create quiz based on a fixed template (eg: Excel, json)
5. Support for multimedia elements (images, videos) in questions
6. Add feature to extend deadline for particular students/all students

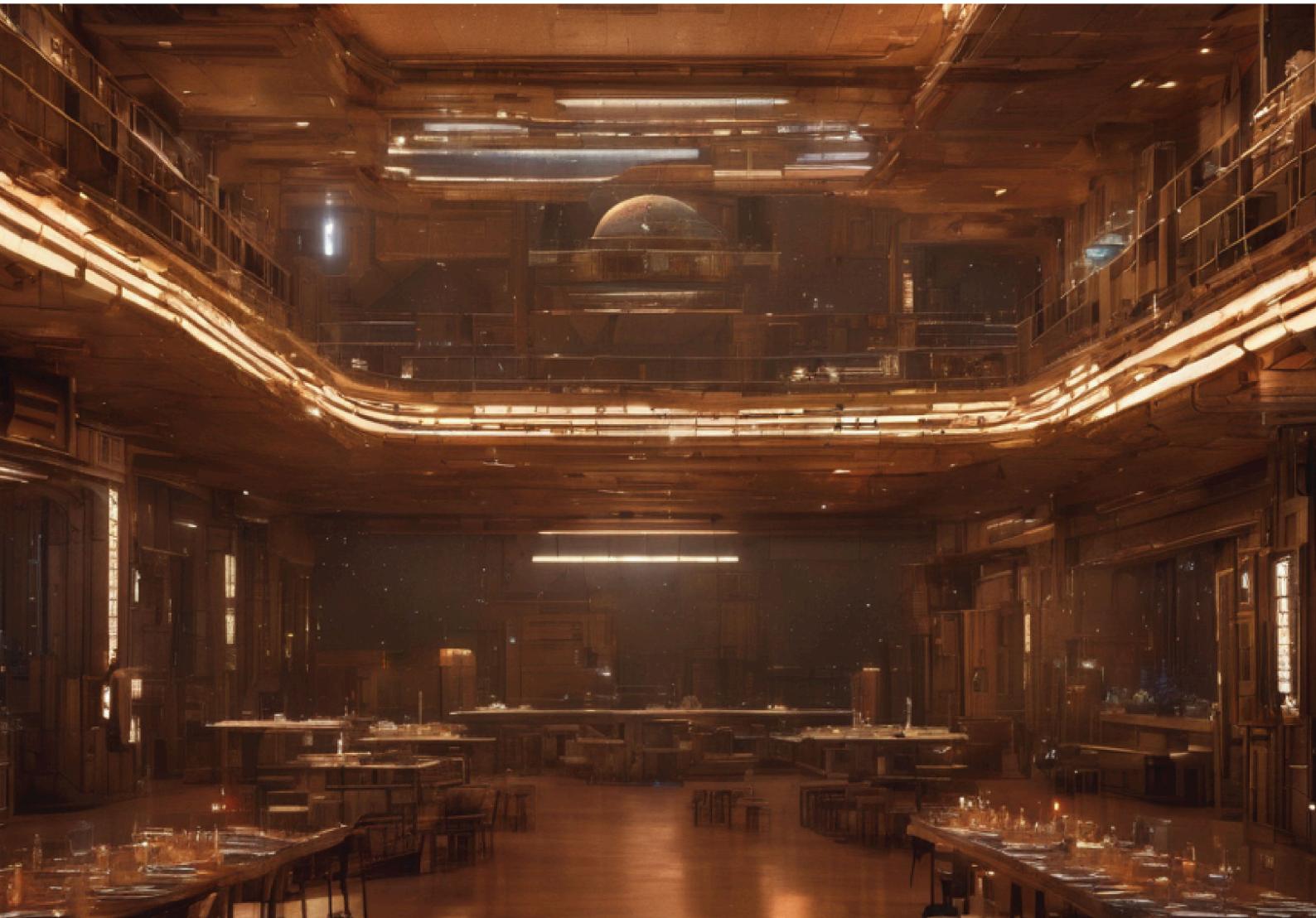
DIFFICOLTY: MEDIUM



IMPERIAL CHESS RELAY

In the heart of the Death Star, an epicentre of Imperial power in the Star Wars universe, the 'Death Star Mess Hall' served as a vital sustenance hub for stormtroopers and officers alike. Yet, amidst the galaxy-spanning operations, culinary chaos reigned, leading to unsatisfied palates and malfunctions.

Your task, capable web developers, is to create 'Imperial Mess Relay,' a Mess Complaint Application inspired by the iconic Death Star. Users will embark on a mission to report meal-related grievances and service issues, ensuring the operational efficiency of the Galactic Empire. The fate of 'Imperial Mess Relay' rests on your ability to streamline culinary matters in the heart of Imperial power. Will you accept the challenge and develop a digital solution connecting modern diners to the legendary Star Wars universe?



BA-SIC

For Users:

- Student
- Accountant
- Profs/Chief warden
- Student Representatives / App devs/managers

1. Login/SignUp based on different user roles from organisation id
2. Comments
3. Add images
4. Send a digest of unresolved complaints each morning to admin
5. Manage different mess for students living in different hostels
6. Student portal should be hostel specific

BASIC

For Student:

1. Register a new complaint
2. View all open complaints
3. Upvote/downvote complaints
4. View Mess menu

For Accountant and Profs/Chief warden:

1. Privilege should be given for their respective hostels
2. Resolve complaints
3. View all open complaints
4. Update Mess menu
5. Accounts can add/update/delete daily orders
add expenses

ADVANCED

1. Rate daily meals [breakfast, lunch, supper, dinner] separately
2. Temporarily block a user
3. Display calorie intake for each student after every meal based on his/her diet intake
4. Feature for accountant to track money spent on a particular item for a specific date range
5. Feature for accountant to get detailed analysis of all expenses (use charts and graphs)

DIFFICULTY: MEDIUM



BE BOP PROFESSIONALS



In the eclectic universe of Cowboy Bebop, where bounty hunters traverse the stars in pursuit of elusive outlaws, communication and collaboration are vital for success. On their spaceship Bebop, bounty hunters face challenges that require the sharing of information and expertise in real-time.

Your mission, visionary web developers, is to create 'Bebop Professionals,' a Professional Networking Platform inspired by the spirit of cooperation and collaboration in the Cowboy Bebop universe. This platform will enable professionals across the galaxy to connect, communicate, and collaborate effectively to achieve their missions and goals, much like the bounty hunters on Bebop. The success of 'Bebop Professionals' will empower professionals to share knowledge and resources efficiently, fostering collaboration and camaraderie across the stars. Will you accept this mission and develop a Professional Networking Platform that captures the essence of cooperation and unity seen in Cowboy Bebop?

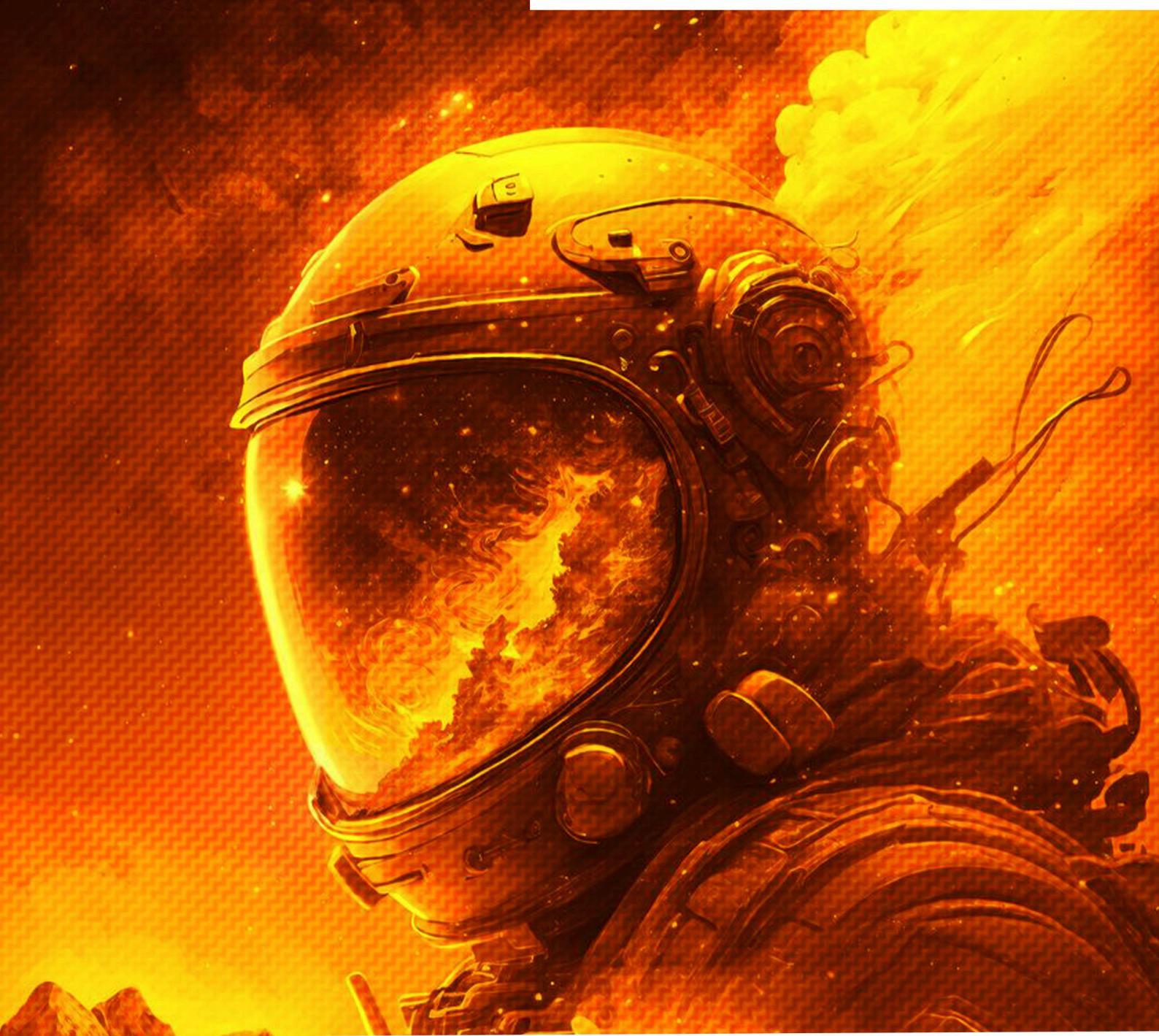
BASIC

1. Users can create and maintain their professional profiles, including details about their work experience, education, and skills.
2. Users can connect with other professionals, colleagues, and acquaintances. Connections can endorse each other's skills and leave recommendations.
3. The homepage features a news feed that displays updates and posts from connections, companies, and industry influencers. Users can like, comment, and share posts.
4. The web app allows users to search for job openings by location, industry, company, and job title.
5. Businesses and organizations can create and manage company pages to showcase their products, services, and job openings.
6. Companies can post job openings, and users can apply for these jobs directly through the platform.
7. Users can only send messages to their connections.
8. Users can send Message-requests to non-connections.
9. Post likes can be of different types, such as Simple Like, Congratulations, Mind-blowing, Heart reaction etc

ADVANCED

1. Users receive notifications about new connection requests, messages, job recommendations, and other activities related to their network.
2. The platform has a resume-building tool based on the information in users profile.
3. Users can publish and share articles, videos, images, and other content related to their professional interests. This helps build their personal brand.
4. Users can set up job alerts for the company /organization they follow.
5. The platform provides companies with a filtered list of applicants according to the profile requirement to reduce irrelevant applicants.

DIFFICULTY: HARD



MARS DOODLES



In the challenging world of 'The Martian,' where astronaut Mark Watney struggles for survival on the desolate planet of Mars, the need for collaboration and effective communication is paramount. Watney, faced with daunting challenges, relied on creative problem-solving and teamwork to stay alive.

Your mission, innovative web developers, is to create 'Mars Doodles,' a Multiplayer Drawing and Guessing Game inspired by the spirit of survival and cooperation in 'The Martian.' This application will provide an entertaining platform for users to engage in collaborative drawing and guessing games, promoting teamwork and imaginative thinking, similar to the way Watney had to think creatively to overcome obstacles. The success of 'Mars Doodles' will encourage players to communicate, collaborate, and think on their feet, much like the challenges faced by Mark Watney on Mars. Will you embrace this mission and develop a Multiplayer Drawing and Guessing Game that captures the essence of cooperation and problem-solving in 'The Martian' universe?



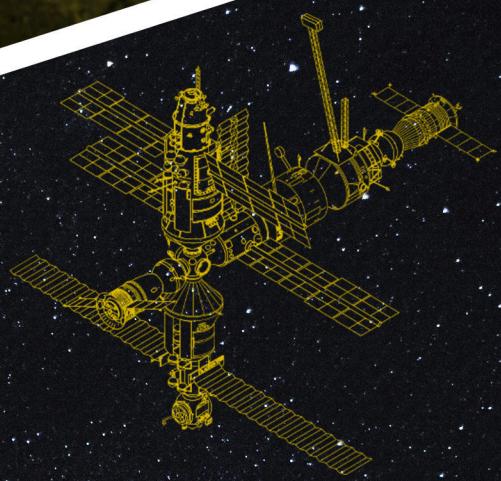
BASIC

1. Implement a real-time drawing and guessing web-app.
2. Add Multiplayer support, where one player draws the word provided and other tries to guess it.
3. Implement in-game chat feature enables social interaction among players.
4. Implement user authentication and profile management to offer players a personalized experience and track their game history.
5. Users can join public rooms with random players or create private rooms to play with friends and invite them using a unique link.
6. Feature of pen of different colors and different brush types
7. Features like, eraser, Bucket fill, color picker
8. Feature to save current drawing and share in on socials
9. Ability for one user to be room admin and, ability to kick users from room
10. Ability to chat restrict a user without kicking them.
11. Ability to see other users mouse pointer with their name or without their name (configurable)

ADVANCED

1. Features to do undo and redo recent operations
2. Word filtering and blocking in chats, give automatic warning to user posting these messages and chat restrict them after a threshold (say 3 times)
3. Ability to draw different shapes such as circle, square, rectangle, ellipse, trapezium, free draw, lines, curvy-lines

DIFFICULTY: HARD



ODYSSEY PLAN

In the visionary world of '2001: A Space Odyssey,' where humanity embarked on a cosmic odyssey to unlock the secrets of the monoliths and the universe, the need for meticulous planning and organisation was paramount. The exploration of the stars demanded seamless event coordination and management.

Your mission, ingenious web developers, is to create 'Odyssey Plan,' an Event Management Application inspired by the spirit of '2001: A Space Odyssey.' 'Odyssey Plan' will enable users to orchestrate and plan events with ease, ensuring that no detail is overlooked. The success of 'Odyssey Plan' will empower event organisers with the tools to execute flawless events, be they cosmic explorations or terrestrial gatherings. Will you embrace this mission and develop an Event Management Application that captures the meticulous planning seen in '2001: A Space Odyssey' to ensure the success of all types of events?



BASIC

1. Create, edit, and organize notes, documents, and web clippings.
2. Create and manage to-do lists and tasks.
3. Allow users to use Kanban-style boards to manage tasks and projects.
4. Format text with options such as headings, bullet points, and links.
5. Easily rearrange and organize content with a user-friendly drag-and-drop interface.
6. Share documents and collaborate with others in real-time.
7. Save web articles, images, and content directly into the web app.
8. Create event calendars and set reminders.
9. Each tasks can have a deadline
10. Ability to set different reminders before deadline (1 hour before, 1 day before etc)
11. Ability to add labels of different types and customizable colors associated with each of the labels

ADVANCED

1. Use pre-designed templates for tasks, projects, and more.
2. Edit and view content even without an internet connection.
3. Utilize more advanced text formatting options, including code blocks, inline databases, and equations.
4. View and restore previous versions of documents.
5. Customize access and permissions for users and teams.
6. Ability to filter tasks by labels
7. Ability to search across all tasks with advanced search options where you can also specify labels, deadline etc while searching
8. Add a way to mention dependencies with a feature to show entire dependency tree.
For example: Task 3 is dependent upon completion of task 2 which is dependent upon completion of task 6. And so on
9. Each task Should have a unique identifier which can be “mentioned” anywhere in application, clicking on which should navigate you to that task and hovering on that should give you a preview of that task’s title

OPEN THEME

HAVE SOMETHING ELSE IN MIND?
YOU CAN BRING YOUR OWN IDEAS!



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