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PRODUCT REQUIREMENT DOCUMENT



HazGuard
Safer Workplaces.

PREPARED FOR
Pesto Project - HazGuard

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"The secret to getting ahead is getting started ."

INTRODUCTION

We at "HazGuard" bring together companies across various industries on one page to help them share hazards and solutions that happen in their workplaces.

What is "HazGuard"?

"HazGuard" is a web app, a one-stop solution to track all the hazards and their solutions in an industrial workplace across different companies, sectors and countries. If a hazard has occurred in your workplace and you solved it, then you can share it or find a solution by searching here.

Why "HazGuard"?

- With the industrial sector's output increase, the risks and threats from hazards have also increased.
- HazGuard will ensure safety by helping every industry's health and safety department make their industry accident accessible and create a safe environment for humans.

Benefits

- Investors can check the company and the overall industry on ESG parameters.
- Government can measure the safety importance in a particular company by its approach to hazards and its solution.
- Companies will take preventive measures by checking previous incidents and solutions in other companies.

Success Metrics

- **Uniformity** - The UI will be based on a consistent theme, and Tailwind CSS will be used to accomplish every task.
- **Compatibility** - The website will be compatible with all browsers with the latest versions like Chrome, Firefox, and Safari.
- **Caching Mechanism** - The website will have an efficient caching mechanism to cache fewer dynamic data, which will help reduce latencies.

Stakeholders

- Companies across the core industrial sector
- Investors
- Governments
- Public
- NGOs

Assumptions

- Every company will share their hazardous events.
- No company will use this website for marketing purposes.
- Every industry wants its people to be safe.
- No company will upload fake data as it will damage its reputation.
- The government will improve mandatory preventive measures with time.
- Investors will judge the company based on ESG parameters.
- Companies will regularly audit their workplaces in line with hazards occurred at other places.

TECHNOLOGY STACK

Backend

- Node.js
- Express.js

Frontend

- HTML5
- CSS3
- React.js
- Redux
- Tailwind CSS

Database

- MongoDB
- Amazon S3

Third Party Tools

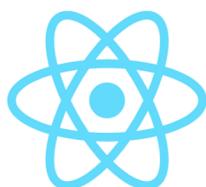
- Git
- Github
- Figma
- VS Code

Monitoring

- PM2
- Sentry

Payments & Auth

- Razorpay
- JWT



FUNCTIONAL REQUIREMENTS

MVP Phase 1

- It should be able to register and log in new user.
- It should allow logged-in users to share hazards with solutions.
- It should enable logged-in users to view hazards and filter them by location, hazard level, industry, and hazard type.
- It should enable logged-in users to save hazards for viewing later.
- It should help users to make payments for different subscriptions.
- It should be able to store data in a database and should be able to access it whenever required.
- It should be able to allow users to update its profile.
- It should allow only logged-in users to access the application.
- It should have a leaderboard of companies and display the safest and least safe companies.

MVP Phase 2

- It should allow logged-in users to comment on hazards.
- It should be able to provide the user with an option to toggle between other plans.
- It should allow logged-in users to give solutions to hazards.
- It should allow users from different companies to contact people from other companies.
- It should allow stakeholders like investors, governments, the public and NGOs to access data for institutional purposes.

NON-FUNCTIONAL REQUIREMENTS

Secure

- Our application only allows access to verified users, so misuse of our application will not happen.
- Hosting our application on a reliable cloud platform provides further security to our application.
- We use JWT in every API, making it more secure as no one else can access the data.

Fast

- JavaScript development framework gives a fast performance.
- Virtual DOM in React allows performance to increase significantly.
- Using Amazon S3 bucket to increase performance.

Good UI/UX

- We have used React.js, which helps us make great UI/UX without repeating code, following the DRY principle.
- We use components which give us customization and help us in the development process.
- We have made a modern UI, similar to other applications, that the user has already used, which helps if the user is not tech-savvy.
- We have chosen a minimalistic approach for the UI, which makes it fast and gives less user friction.

Scalable

- We are using REST APIs and NoSQL databases, which are scalable platforms.

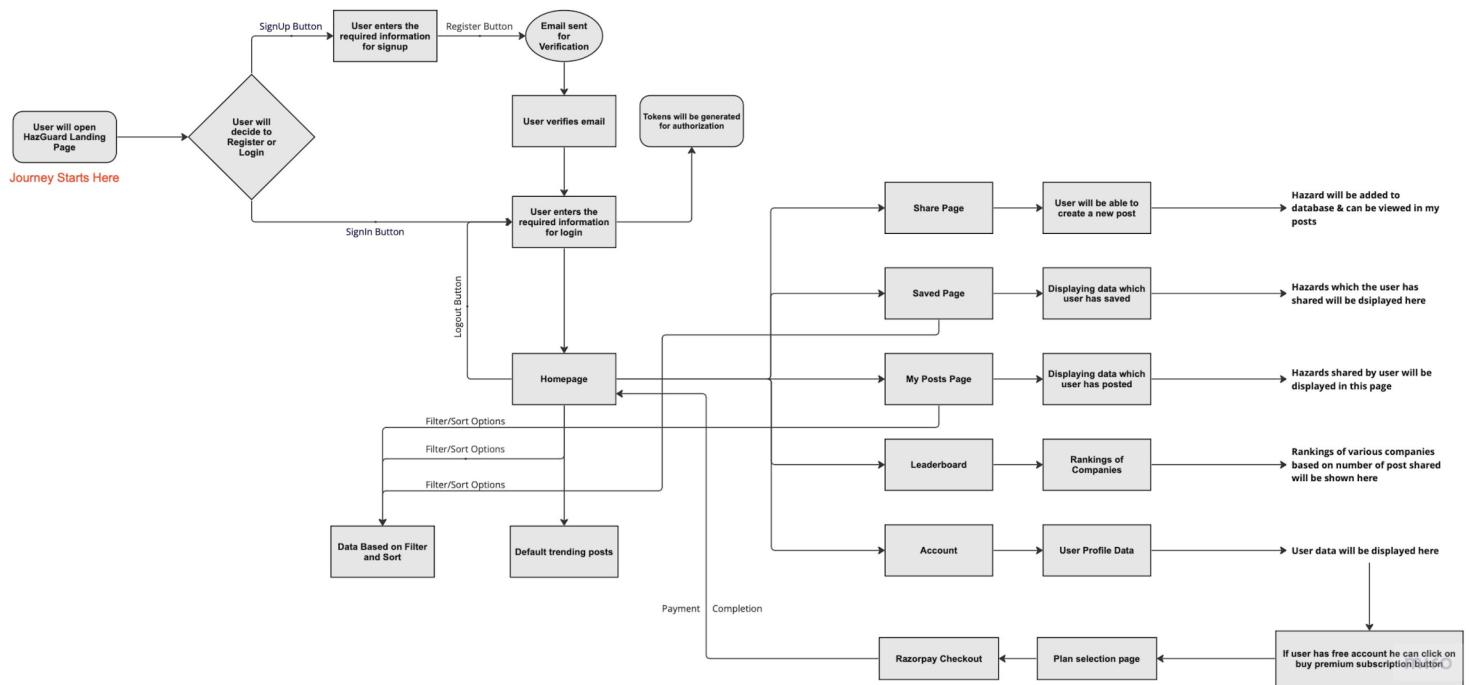
Reliable

- Error handling with defined error codes and messages.
- Continuous updates in our application.

MILESTONES, TIMELINES & PRIORITES

MVP	DETAILS	PRIORITY	TIMELINE
Tech stack Integration & setting up basic folder structure	React.js, Redux, CSS, Github Actions, Express, MongoDB, Sentry, Schema Development, Amazon S3	HIGH	Week 1
User Management - Signup & Login API development	Companies can signup, login through email, password & email verification	HIGH	Week 2
Hazards Listing Page, Fetch Listing Details API	Company can create, update & delete hazard	HIGH	Week 2
Views and saves	User will get the trending hazard based on view & can save it to profile to read it later	HIGH	Week 3
Sort & filter	User can sort & filter hazards	HIGH	Week 3
Rankings	User can see rankings of all companies	MEDIUM	Week 4
Payment Integration	Razorpay API integration to buy national & international subscription	LOW	Week 4

JOURNEY OF A USER



FAQs

Do we need an account to access the application?

Yes. Registration is needed to understand the user and provide the exact solution for hazard prevention and workflow suggestion.

Do we need to buy membership?

Our website has divided hazards into multiple levels to prevent significant incidents. To see national or international hazards user has to buy a subscription.

Which industries can put their data on the website?

We provide access to users across all industries.

What are the different types of users in HazGuard?

There is only one type of user in which each user can see others' event & also can share their own

What are some of the supported platforms?

Currently, our offering is only via the web. We support most of the latest versions of web browsers.