

Boosting Small Business Operations Through Customized AI Integration

About Client

The client is a budding name in the tattoo-making industry who was looking for an innovative web platform. By leveraging technology like SaaS and Artificial Intelligence (AI), the client aspired to improve process for appointing artists as per client requirements.

Challenges

Historically, managing artists, design ideas, and experts has been a conventional process accompanied by several practical challenges:

- Time-consuming System:** Most small businesses like tattoo studios, spas, and chiropractor clinics use manual forms to book appointments and maintain records of important stakeholders. The time required to enter such details is considerable
- Hassle in Tracking Consent Forms:** Currently, small businesses find it challenging to track consent forms filled by various customers. Free-to-use document manager software has limitations in managing a systematic database of experts, clients, and relevant associates
- Limitations in Generating Innovative Ideas:** There are evident limitations in tattoo designs that pose creative challenges to both clients and artists. Same can be said in case of other software platforms. Small businesses need an apt solution to fine-tune the necessary requirements based on the practitioner’s domain

Our Solution

After analyzing client requirements, our team decided to utilize React JS and its micro-services with the combination of Artificial Intelligence. The ability to update dynamic UI parts made it easier to choose React JS as the development framework.

In addition, we implemented these technologies - React Data Table, AWS S3, Git bucket, and OpenAI. The amalgamation of all these tools led to the developing of an AI-integrated SaaS web application with high customization capabilities.

Here are the principal utilities of each technology:



React Data Table

To sort, classify, and maintain vital and large datasets of customers, tattoo designs, and consent forms



OpenAI

This technology is mainly used for generating innovative tattoo design ideas. We used this tech with ChatGPT to create custom images by evaluating the popular keywords of the end customers. The automatic mapping of user behavior was crucial to implement OpenAI in this project



AWS S3

We implemented Amazon S3 for data storage and protection. Notably, studios of any size and requirements can bank on the robust security measures of AWS



Automatic Consent Form Filling

To ensure robustness of data security and adherence with the data compliance laws, we utilized Amazon S3 for storage of automated consent forms

Outcomes

The project led to the developing of a SaaS platform with intuitive UI for the tattoo studio. Combining the mentioned technologies simplified services like inventory management, data storage, record-keeping, and appointment scheduling.

Here are the primary outcomes of this project:



Rise in Efficiency

There was a 30% increment in overall efficiency and a 15% reduction in time utilized to maintain data manually. In addition, there was a 60% reduction in manual tattoo designing.



Data Safety

The implementation of safe data signature enhanced regulatory requirements. Notably, this service solved the issue of consent forms and enabled the tattoo studio to access vital info on AWS S3 with ease



Rise in Customer Satisfaction

The use of AI for generating unique tattoo designs led to an increase in sales by 25%



Increase in Monthly Subscription

boosted the client’s revenue and reduced the to and fro processes by a staggering 80%. The tattoo studio witnessed a 2x increase in the number of monthly subscriptions