

**DESIGNING A PATIENT-FIRST TECHNOLOGY SOLUTION FOR  
REAL-TIME FINANCIAL ASSISTANCE IN HEALTHCARE**

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**CASE STUDY**

## WHAT DID WE TRY TO SOLVE?



Our client is a leading Healthcare Technology Solutions company that provides customizable workflow solutions, revenue cycle and patient management software in the US. They specialize in applying robotic process automation (RPA) in healthcare to enhance patient experience and thereby driving revenue growth.

A patient walking in for healthcare or treatment is primarily worried about the availability and affordability of healthcare. Our client was looking for a solution that would screen a patient's background in real-time for suggesting the best applicable sources of funding through third-party payers. Basically, an automated process that would determine the kind of financial assistance a patient is eligible for based on the information fed into the system. For this they approached Zuci's team to develop a patient-first technology solution.

## HOW DID WE PROPOSE SOLVING IT?

Zuci's team suggested designing a Minimum Viable Product (MVP) that would have the key features and this would be developed as a cloud-based solution which would be a first for the client. This would be a web application where the user (read: patient/their family or friend) will be able to do the following:



Input basic details by which information regarding the demography and financial background of the end user is captured



The system logic will then assess the financial soundness of the user and identify a financial assistance prospect



It will also be able to track the user activity for follow up on documentation and other requirements

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## HOW DID WE PROPOSE SOLVING IT?



Hence, this application will not only identify financial opportunities for the client but also assist them through the entire process.



This product can be further scaled to offer exclusive services for bigger clinics or hospitals, whereas shared services can be used to cater to smaller clinics.

## WHAT WENT BEHIND MAKING THIS SOLUTION A REALITY?



After a thorough system study, the team at Zuci presented the client with a host of functionalities. After discussions, essential functionalities were chosen to be part of the Minimum Viable Product (MVP) for this project.



The team then started working on the Wireframes and User Interface (UI) design for the web application. Parallely technical design was initiated for the app development. The wireframes and UI design were then presented to the client. Now all the stakeholders had a clearer vision of the product to be developed and how it should look.

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## WHAT WENT BEHIND MAKING THIS SOLUTION A REALITY?

Since the client organization used dotnet technology, this product was also developed using dotnet for the middleware and major components. This would enable the in-house team at the client's end to overlook the product since they are familiar with the technology.

The well-known and standard development platform – Angular, was chosen to design the frontend for this web application and SQL was used for backend database management.

The first phase of this development was completed in 4 months and MVP was delivered to the client.

## WHAT DID WE DO OUT OF THE BOX?

Zuci's team automated the entire deployment process for this project as part of digital transformation.

After an initial analysis, the team presented the option of adopting Infrastructure as Code (IaC) for deployment to the client. IaC is a process of managing infrastructure through code rather than doing it manually. The benefits of using this as part of the deployment were as follows:

1. Speed – Goes without saying that automating a process beats having to manually deploy a project
2. Better management – Automation allowed more efficient management of the infrastructure
3. Elimination of errors – This process not only reduced the effort of the team but also eliminated errors throughout deployment

This ensured seamless deployment, thereby ensuring easy onboarding for the client.

## WHAT DID WE WANT TO ACHIEVE?



Given that desktop installations and upgradation are outdated and difficult because of its manual process, the team wanted to build a cloud-based SaaS solution which can be hosted in-house, and URLs can be shared as required. The main objective behind this was to enable easy maintenance of the product in the long term



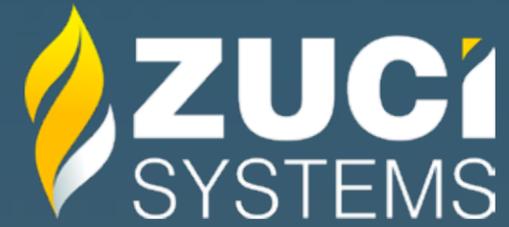
Develop rules to identify best candidates for the relevant financial assistance programs



Integrate real-time presumptive scoring on the front end once details are fed, for quick service

## TECH STACK





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