NSWMA History

NSWMA, also known as the National Solid Waste Management Authority, is one of the well-known waste management authorities operated by the Jamaican government. The National Solid Waste Management Act (2001) made it mandatory for Jamaican government to take all necessary steps to manage solid waste on the island efficiently. It has apparently grown during the last few years since it was launched for people's convenience. Before the launch of such a service, there was rarely a truck that runs around the island for collection of waste or garbage.

In many of the rural areas, people or even the cleaner of the areas used to burn the garbage or wastage to get rid of it in the most effective way. But after the Launch of NSWMA, the island has a relatively effective and accurate network of refuse collectors, this service also provides its service in the rural parishes.

People of Jamaican can now see trucks all across the island making the garbage collections. This service makes it quite convenient as it offers them numerous advantages like safeguard public health, on-time waste collection, garbage transportation, etc. After collecting the waste from several areas, the service provides (Jamaican's government) assurances to separate garbage in different categories like recycled, reused and makes sure to dispose of the remaining garbage in an environmentally sound manner.

Core Value of NSWMA
A- Accountability
T- Transparency
T- Teamwork
I- Integrity
R- Respect
E- Excellence

Mission of NSWMA
To ensure a clean Jamaica by managing solid waste effectively through public cleansing, adherence to public health and environmental standards, public education and enforcement programs supported by advanced technology, the participation of communities, and the delivery of services by highly trained and engaged staff.

Vision of NSWMA
To be a model solid waste management entity, using cutting edge state of the art technologies to maintain a clean and healthy environment comparable to global standards.

How Our Solution Helps Them:
When our valuable client NSWMA came to us with their requirement, we analyzed their requirement completely to ensure to provide them with an excellent solution stack that fulfills all their business requirements in the most effective way. We considered making use of an agile development strategy to complete the development journey efficiently and accurately as per our clients' demands.

With the help of an agile development strategy, we efficiently crafted an excellent functioning system in a modular fashion. We provided our clients with components that they demanded to have in their system. We provided them with a responsive solution to help them to cover most of the global platforms. Advanced solution stack developed by our developers improved the efficiency and accuracy by decreasing human errors and misunderstandings.

Requirement
The Jamaican government provides garbage collection services to the people living on the island. All the work was performed traditionally, which makes it quite hard for our clients to manage their service efficiently. Thus they explained their requirement to us, and we ensured them to provide them with an excellent solution on the assigned deadline.

To make the garbage collection process more straightforward and efficient, our clients demand to have excellent solution stack for the global stack. This solution made it easy for them to provide their garbage collection service in most of the areas of the island. This solution contains all the modules which any of the ordinary solutions must-have.

We performed a deep analyzing process to have deep insight into our client's requirements. We also asked our clients about their requirements for functions and features that they want to leverage in the system. And as per our client's requirement, our development team sketch the central idea for the solution. We identified the solution users to ensure that they get satisfactory results when they use this advanced solution on their preferred device.

Our Approach and Development Process

Once after completing the task with the requirements process, we subdivided the requirements into several components. Each component was equally important for the better functioning of the system. We opted for an agile methodology during the whole development journey to make the development task easier and quicker, ensuring to satisfy all over clients' needs. Check the below process to know how we meet our client's project requirements efficiently using the agile methodology.

Requirement Gathering

It was the initial stage which we performed while starting our development journey. We had a complete overview of our client's project development requirements. We analyzed how our clients are facing hassle with the traditional approach and how this digital approach can help them in the best possible way. And completing the deep analyzing process, we finalize our client's requirements.

Designing

Designing plays a vital part when it comes to crafting excellent projects, ensuring to meet all the requirements of the clients in the most effective and efficient manner. Most of the development firms spend more time on front end designing, but we focus on all the layouts, which help us to craft picture-perfect solutions fulfilling all the requirements of the client's business in an accurate manner.

Approval Process

Once after designing the solution initially, we get it approved by our clients to ensure all their project requirements are covered in it. And if our clients suggest any changes in the design, then our support team makes it accordingly to ensure utmost client satisfaction.

Development Strategy

Once after final approval, we move to further step and craft an excellent development strategy dividing the project into several functional modules. Our development team also focuses on the features and functionality of the solution stack to provide a seamless experience to its users.

We divide the development work into functional modules and start initially with the functional specific module. We divide the development task into 3 layers like:

1. **Data Layer.**
2. **Business Layer.**
3. **View Layer.**

Communication
Communication or interaction plays a vital role, especially when it comes to developing an excellent project satisfying all the requirements of our clients. We follow effective communication channels to understand our client's requirements in the best way.

Welcome Changes All the Time
If our client's demands for any of the changes during the development journey, then we welcome their changes at any level to satisfy our clients' requirements and provide them with an excellent functioning project.

Testing
After completing the development process, we opt for the rigorous testing process to ensure not a single bug or error is left in the project. We perform rigorous testing on each module of the solution stack to ensure it is functioning in the best possible way. Once after completing the testing process, we ask our clients to test the solution in real-time by making use of it on their preferred device.

Deployment
After getting done with the testing process successfully from our side and client-side. We ensure to deploy the project to the server and ensure that it works efficiently over the production server.

Technical Specification
As stated above, we crafted an excellent solution stack for the global platforms using modern technology specified by our clients. We went for the open-source technology stack so that our clients don't have to invest an extra penny on the additional licenses. We choose PHP for server scripting and MySQL for database management.

For the fastest and easiest processing of the solution stack, we make sure to design the efficient relational schema on MySQL and also integrate all the required entities. We build code that is efficiently focused on synchronous and asynchronous requests to the server to balance the load and faster data processing.

The WorkFlow of Our Solution Stack Encouraging Effective Management
Explore the solution stack flow to know how we crafted an excellent solution for our clients helps them with efficient business management.

User Solution Flow
- Tech stack users are allowed to upload the image of the garbage in any of the areas by capturing it from their smart device. Once they upload the garbage image, they need to enter various details like their name, contact number, garbage size, email address, and locations.

- After entering all the details successfully, users can click on the submit button to send their garbage collection request to the chauffeurs.
- Once Users click on the submit button, they will be provided with the reference number and other details which they have submitted.
- Users can use this reference number to know the status of their request.
- Users are also allowed to schedule the service as per their need through the solution stack.

Admin Panel Flow
- Admin can view and manage users' requests through the solution stack designed for effective management.
- They can even schedule and update the garbage request through the advance panel, ensuring to provide them with full control over their business.
- They can check all the details provided by users and task essential action to satisfy the people's demands in the most accurate way.

Advance Features we Included in the Solution Stack
For better functioning of the solution stack, we have integrated many features and functions in our solution stack. This function makes control and management tasks much easier for our clients, checking to know which functions are features and functions are integrated into the solution stack.

Features of Users Solution Stack User Login
Users can log in themself into the solution stack to make use of it.

Upload Image
Users are allowed to upload the image of the garbage from any of the devices they are using.

Edit Details
Users can edit all the details related to garbage like user name, location, garbage size, etc.

Check Status
Users can check the status of their placed request using the reference number, which they are provided when they place the request.

Features of Admin Solution Stack Check Request
Admin can check a list of requests placed through the solution stack to complete it efficiently.

Update Request Status
Admin has the authority to update service requests such as pending, approved, completed, etc.

Schedule Request

Admin can check the details of the scheduled request to plan accordingly.

Map View
Admin can have a quick look at the map to know in which area they have more requests and from which they can start completing the request.