Project Summary: UK Hydrographic Office

Project Name: UK Hydrographic Office (UKHO)

Client: UK Government

Company: Mastek Ltd, Navi Mumbai

Role: Software Engineer

Duration: April 2022 - November 2024

Project Overview

The UK Hydrographic Office project was a critical initiative undertaken by the UK government to maintain and publish maritime data and navigation products for global shipping. The application provides digital services for hydrographic data management, route planning, and chart publications used by both commercial and naval ships.

Key Responsibilities

Business-Focused Contributions:

- Collaborated with product owners and QA to gather business requirements and convert them into API designs and use cases.
- Facilitated sprint planning, demos, and backlog grooming to ensure business alignment with technical goals.
- Created user stories and acceptance criteria for new modules and enhancements.
- Documented API contracts, request/response structures, and data validation rules.
- Acted as a bridge between QA, development, and stakeholders to clarify system behavior and integration flows.
- Provided functional support during UAT to resolve business logic mismatches and bugs.

Technical Contributions:

- Designed and consumed RESTful APIs using .NET Core and Entity Framework.
- Used Postman for API testing and data validation.
- Wrote and optimized SQL queries to analyze and validate data flow.
- Managed code and builds via Azure DevOps CI/CD pipelines.
- Participated in code reviews and continuous improvement initiatives.

Technologies Used

C#, .NET Core, Entity Framework, SQL Server, REST APIs, Postman, Azure DevOps, Git, Agile (Scrum)