**Project Details**

Project name: Spaero Assist

Project Start Date: ASAP

Client: Spaero Limited

Project Timeline: To be determined

**Introduction:**

Buyers in the aircraft parts world perform repetitive tasks whilst performing their job role, which we intend to stop with Spaero Assist. The idea behind Spaero Assist comes from the functions performed by airline buyers, which include logging in to, and navigating multiple data service websites, and webstores to find obtain pricing for aircraft material’s that the buyer has been instructed to look for.

**Scope:**

There are various processes that the buyer must follow, depending on the website that they are navigating. I have listed them below:

Web Data Services:- Services such as ILSmart.com, PartsBase.com, avspares.com and Locatory.com are designed for distributors to list their stock holdings. Buyers log in to each respective site, searches for the part number they are looking for, and the results of the sellers are displayed. The buyer would then email each supplier to obtain a quotation. They are able to make a phone call, but ultimately, the quotation and any relevant documentation are pushed back via email.

Webstores:- Sites such as Boeing, Satair, Proponent, and many more are considered webstores, whereas the buyer can login to the site, search for a part number and the information relative to the stock holding, including the price are provided straight away.

Customer Portals: Some suppliers have customer portals, for their users to log in to, and have the ability to submit an quotation request. Once the results are provided, the buyer can make their decision on the quotation and compare it with other quotations received. I think the idea behind it is that the buyer always has a record of the quotation and they can log back in to review the information at a later date.

The scope is to build a deployable software that allows the user to input their login details for various sites in a credentials section. We will build a tool into the software that will allow users to type in the parts that they are looking for.

An important consideration, is the ToU of each respective site, and more specifically the restrictions therein to use any third party software to access the site. We would need to obtain API documentation from the site and have their permission to operate the site. ILS have restrictions.

PartsBase on the other hand have API documents [PartsBase API](https://apiservices.partsbase.com/docs/index#/).

AvSpares.com are also happy for us to access their database.

**Functional Requirements:**

Admin Features:

* Team Management (add/view/disable)
* Integrations Management (add/view/disable)
* User Management (add/view/approve/disable)
* User Activity Oversight
* Reports Dashboard
* Billing (Stripe connection)
* Error Reporting

System Features:

* Responsive UI
* MFA/2FA
* Search Engine (google)

Buyer Features:

* Buyer Registration and Approval
* Admin Section for user management
* Credentials Management (perhaps consider utilising third party software)
* Account Management features
* Request generation (for parts)
* Requests Management
* Email/App Notifications
* Orders (feature to add later into the project)

Platform:

* Web

LLM:

* To be discussed

**Non-Functional Requirements:**

* Scalability – Support for hundreds of con current users.
* Security – HTTPS, encrypted passwords, role-based access
* Availability – 99.99% uptime, load balanced architecture (Azure)
* Performance – Page loads within 2 seconds
* Maintainability – Modular Codebase and RESTful API’s.
* Compliance – GDPR-ready, Credit Card compliance.

**System Architecture:**

* Frontend – to be discussed.
* Backend – to be discussed.
* Search: Elasticsearch, AI tools to navigate site interfaces.
* Authentication – API, MFA/2FA
* Payments – Stripe
* Database – to be discussed
* File Storage – Azure

**Milestones: to be discussed**

Milestone Estimated Completion

Requirements Finalized Week 1

Frontend MVP Week 8

Backend Completion Week 9

Integrate Payment Gateway Week 10

Testing & QA Week 11

Launch BETA Week 12

**Future Enhancements:**

* Native Mobile App (iOS/Android)
* Order generation with ERP Integration via API.
* AI Powered Support
* AI Powered negotiations
* Technical Data (PMA/EPA, Technical Documentation for aircraft including illustrated parts catalogues)
* Vendor Subscription & Fee Model (see below)

Vendor Features:

* Vendor Registration and Approval
* Product Management (add/view/delete)
* Inventory Management