# Plan for what we going to host

For our application to work successfully and without any errors, we will need to host:

* A database
* An API
* Website

In this document we will be breaking down what hosting plan and costs that will be incurred and why we decided to go with the options we have. There are 3 providers that we researched to formulate the best plan that we could to ensure costs are as low as possible.

# Database hosting

For the database Hosting we can make use of:

* azures single database option on the standard plan Which would cost us ~R447.40.
* The amazon web services equivalent to azures single database option is going to cost us about ~R418,69
* Google clouds option for the standard plan is going to cost us ~R378,76

**Conclusion for our choice of provider for database provider.**

For our database provider we have chosen to go for the azure option. While this option is more expensive it gives us more database storage for the database. This option will also be a lot more scalable and will synergise better with our choice for the API.

# API and website Hosting

For the website hosting we can make use of:

* Azures pricing for their standard plan that will allow for our API to be accessible and to host the website is ~R1094,40
* Amazon web services offer the same service but per instance which means we will be ~R1045,89

**Conclusion for our choice of provider for API and website hosting provider.**

For the hosting of our API and website we have decided to make use of azure as it works out to be the best option even though it costs slightly more, as with azure we get the ability to use a custom domain meaning we can make our own URL to the website and API as well as gives us the ability to publish an unlimited amount of web apps so if in future we decide that a new function requires an app we will be able to easily store it without the fuss of searching for providers again. This plan also means that if the amount of users gets to much for the app to handle it will bump up the capacity to allow more users through.

# Closing and total pricing

In closing we have made these choices based off what we think will allow our application to work the best under a heavy load and what will be the easiest in terms of usability for the goal pro. The total pricing estimate will be ~R1541,80 per month.