**Project Name: Vortex, Simulated Cryptocurrency Trading Platform**

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**Project description**

We acknowledge the significant financial risks associated with cryptocurrency investment. Vortex is a web based, simulated cryptocurrency investment platform which addresses this issue by allowing users to practice and gain knowledge of its concepts without financial loss. Users will be able to log in to our website and simulate buying and selling cryptocurrencies. Users will be provided with various sources of information to assist in making investment decisions, including their own history of transactions, price prediction methods, live chat between users and social media data.

**Results**

We have developed a website called Vortex which allows users to select a starting balance and use this balance to create and manage a cryptocurrency portfolio. The website uses the Angular 9 framework, connected to a C# API hosted in Microsoft Azure. The project is hosted exclusively in Microsoft Azure as it provides an easily manageable, cost effective solution and has reliable data handling. We downloaded currency price data from a free API called ‘CryptoCompare’ and stored this in Azure Table Storage to allow for quick access without relying on a third-party API. Further features such as social media integration, web help and price prediction are elements that have been implemented using Azure Functions written in Python.

Users can compare their performance with friends, as well as view various price prediction metrics, which will display numerous charts informing users about the potential changes. Relevant information from various social media websites is also available to allow users to make more informed decisions.