Memorandum

To: Overlord Founder of our Precious Startup
From: San Lee & Christian Luciano
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Title: Programming Language for the Next Unicorn

C# .NET Core supports UNIX and our machines as Microsoft is fully supporting macOS and Windows with Visual Studio (Code). The IDE builds and provides an .dll assembly located in the debug folder. The program can be run with `donet projectName.dll` on CLI without any code changes. We can publish the project for different operating system by using `dotnet publish -r [os specific]` (dotnet publish -r rhel.6-x64) Also, Visual Studio provides an easy-to-use debug mode for exploratory programming.

For our application, we are able to take advantage of the ReadLine method of Console to read an input of undefined number of lines from the terminal. We are able to use the StreamReader class to read text lines from files. Finally, we can use ASP.NET to utilize WebSockets, a protocol that enables two-way communication over TCP connections.

Modular programming
C# allows the use of classes and namespaces, which can be used to construct modules and separate functionality. We can also use C# with Language Integrated Query (LINQ) to query and process different forms data, including JSON. For JSON, the JSON.Net package provides a mode to read and write JSON effectively.

Dynamic code loading
.NET Core runtime provides high flexibility in dynamically loading assemblies with the use of dynamic loading library (dll) which makes plug-in development possible. New features can be added or modified in the form of plug-in which enable the application to avoid the need to recompile the entire program.

Automatic unit testing and unit coverage
Visual Studios has the capabilities of creating automated tests such as unit tests, coded UI tests, web performance tests, and load tests. We can also use dotCover offered by JetBrains to ensure code coverage. Visual Studios also has a debug mode which we will use for exploratory programming.