**Architecture Considerations**

There is not a large amount of architecture considerations to factor in when designing the new system for HOOF. The architecture will be mostly on the hosting end, so HOOF will not have a significant amount to carry on theirs. We have designed a system view outlining the expected architecture that will be realized using WordPress as our hosting provider.

As seen in the attached diagrams, we outlined several requirements for the system that are demonstrated with the design viewpoint. We identified that the system will require a Database to hold information, as this will centralize the organizational information. The system will need a web host to hold the site and a cloud provider alongside this. A backup host to ensure integrity is also required, so that information will not be lost. External payment processing will be needed to ensure online donations can be safely taken. An application server will be needed so that web application function will be facilitated.

The realization viewpoint outlines systems that we have identified will fill these needs. For our content management system to tie the pieces together, we have decided to use the open source WordPress, since its large market share means there is a great deal of customization and support available. For the payment processing we have decided to give the user multiple options to complete the transaction. We offer both PayPal and iATS, giving the user several options that will work well with our organization and take the obligation of security off our end. We have decided that the website site and database will be hosted on HostGator, as they offer the service of offering both on a service that is affordable and has little down time. The service specializes in WordPress hosting and thus will work well with other aspects of our system. We have selected Dropbox as a manner to backup organizational files. Lastly, we decided to use GlassFish as an application should the need arise, to facilitate web app communications with the database.

Narrative: The following two diagrams outline the components of this information system. Users, Board Members, and the various servers and technology user are all outlined.

Diagram 1: This diagram represents the design viewpoint of our system, what general items will be required by the system.



Diagram 2: this diagram represents the realization viewpoint of the system, with ideal system names included to represent which system will be used to fill the needs outlined in the previous diagram.

