**Software Versioning and Packaging Documentation for Savar iOS App**

**1. Versioning and Packaging of the Software/Service:**

For our Savar iOS app project, we implemented Semantic Versioning (SemVer) to manage and track the versions of our software systematically. Semantic Versioning allows us to increment versions based on the significance of the changes made: major changes increment the first digit, minor changes affect the second, and patches affect the third. This approach helps in managing dependencies and ensures backward compatibility and predictability for users and developers.

We packaged our software using Docker, which provides a consistent environment for development, testing, and production by encapsulating the application and its dependencies into a container. This method ensures that our application performs uniformly across different environments and simplifies deployment and scaling processes.

**2. Chosen Version and Type:**

- **Version:** The initial stable release of our application is tagged as **1.0.0**. This version signifies that it is our first production-ready release following the completion of major feature development and thorough testing.
- **Type:** We utilized PKG versioning for our Docker images to keep track of different builds. Each Docker image built corresponds to a tagged version in our version control system, ensuring clarity and traceability between the source code and the deployed artifact.

**3. Publication and Release Details:**

The Docker image for Savar has been published to DockerHub, providing an accessible platform for users and developers to pull the image and deploy it in their environments. The DockerHub repository is regularly updated with new versions as they are released.

- **DockerHub Link:** https://hub.docker.com/r/singh651/savar-ios-app

This repository includes tags for each release, with **savar-ios-app:latest** always pointing to the most recent stable version.

**4. Contingency for Publication Issues:**

As of now, the deployment to DockerHub proceeds without significant issues. However, should any problems arise, such as unexpected delays or technical difficulties with DockerHub services, the following contingency measures are in place:

- **Alternative Hosting:** We will temporarily host the Docker images on an alternate cloud service provider and provide direct download links to our users via our official communication channels, such as our project's GitHub repository or the project website.
- **Communication:** Updates regarding any issues, along with detailed instructions and links for accessing the alternative downloads, will be communicated through our official social media channels and user forums.

In the event that we decide to distribute our application through the Apple App Store and face delays or complications in the review process, we will ensure that:

- Pre-release versions are available for testing through TestFlight.
- The last stable version remains available and supported while new submissions are reviewed.

This document and related artifacts (e.g., Docker images, source code snapshots) are packaged and available for download, ensuring we have access to the latest stable releases and can track the development progress of Savar