**CSS 545 HW3 BLOOD BANK APPLICATION (iOS)**  
  
**The various states that an app can enter on your platform of choice as blood bank application:**

1. Not Running State:
   * This is when the app is not in memory and has not been launched by the user.
2. Inactive State:
   * The app is in the foreground but not receiving events.
3. Active State:
   * The app is currently running and receiving events.
4. Background State:
   * The app is in the background and executing code.
   * Background tasks such as data fetching or processing continue in this state.
5. Suspended State:
   * The app is in the background but not executing code.
   * In this state, the app remains in memory but is not actively running.

**The various states that you must consider for your app, why you must consider it, and what must happen in each state:**

For our blood bank app, considering the following states is essential:

1. Launch State:
   * When the app is initially launched by the user.
   * Initialization of crucial components like database connections and user authentication should occur in this state to ensure a smooth start-up process.
2. User Interaction State:
   * When the user is actively using the app, browsing blood donation options, or interacting with the interface.
   * Handling user inputs, updating UI, and managing data retrieval processes are essential in this state to provide a responsive user experience.
3. Background State:
   * When the app transitions to the background, for example, when the user switches to another app or locks the device.
   * Background tasks such as updating notifications or fetching new data should be managed efficiently to minimize resource usage and battery drain.
4. Resuming State:
   * When the app is brought back to the foreground from a suspended or inactive state.
   * Restoring the app's previous state, including any unsaved user input or ongoing processes, ensures a seamless user experience and prevents data loss.
5. Terminated State:
   * When the app is terminated either by the user or the system.
   * Cleanup tasks and saving application state are crucial in this state to ensure data integrity and a smooth user experience when the app is relaunched.