Pseudocode: Server

**Init Server**

{

Create a TCP socket for listening

If the socket fails

Terminate the program

Set up the in\_addr struct to accept connections from any IP address

Bind the socket

If binding fails

Terminate the program

Begin listening for connections

Go into a read loop (the Listening state)

}

**Listening**

{

If a new connection occurs, fork a child process to handle the request

If the fork fails

Terminate the program

Else, go to the Waiting state

}

**Waiting**

{

Check the socket for data

If data is on the socket

Go to the Process GPS Data state

If the program terminates

Close sockets and clean up data

}

**Process GPS Data**

{

Read raw GPS data from android in

Convert the raw data into an easily useable form (a struct)

Read the contents of the XML document to a list

Append the new GPS coordinates to the list

Write the updated list back to the file

}

**Terminate Program**

{

Terminate all Child processes

Close all sockets

}