IP detection or Detect location for Labil

16t0021

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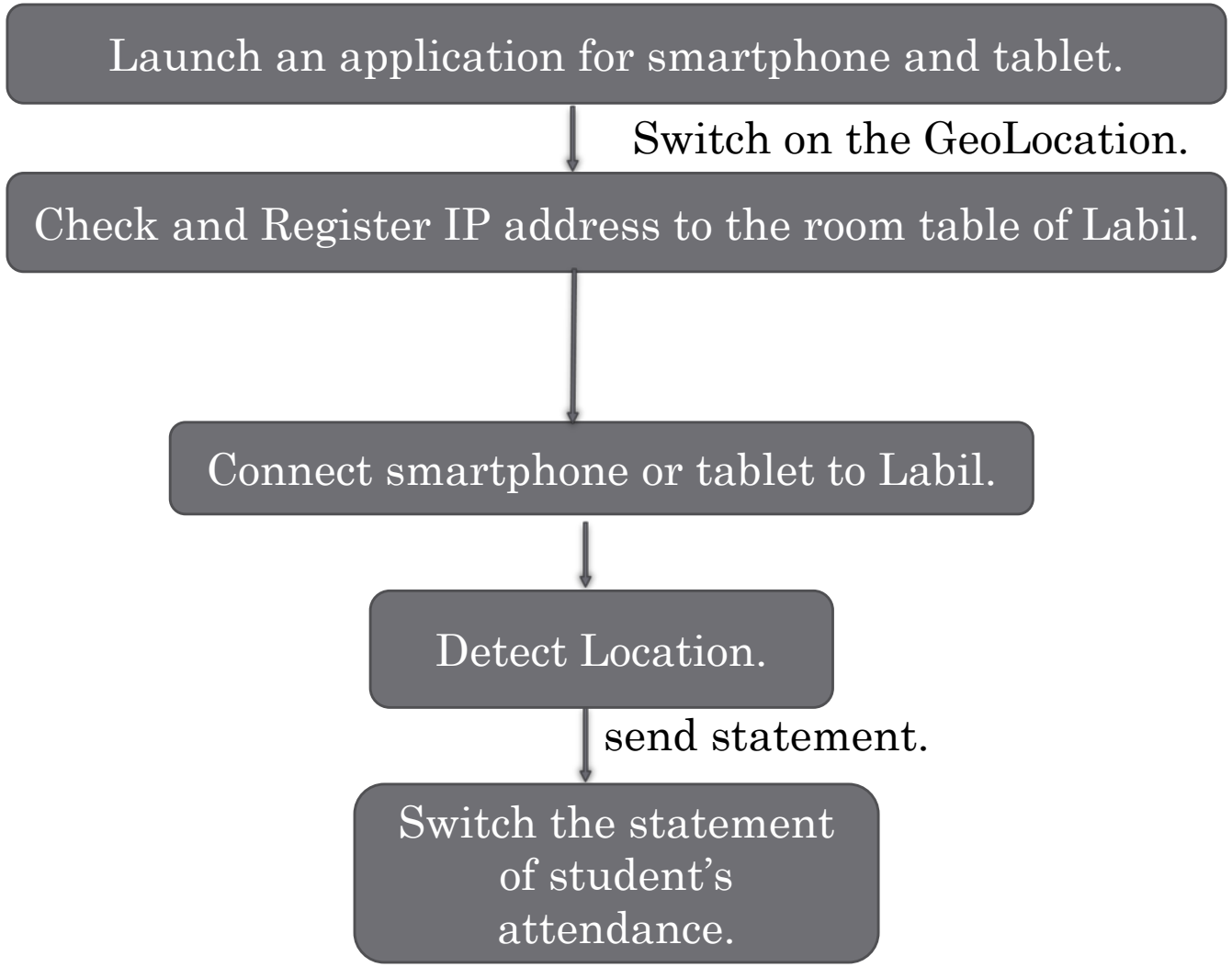
Restriction ~GeoLocation via WiFi~

- Labil system manages student attendances such as “In Lab”, ”In hosei university”, and “Go home”.

- Most students use the WiFi service when they come at the Hosei University and then use the Internet.

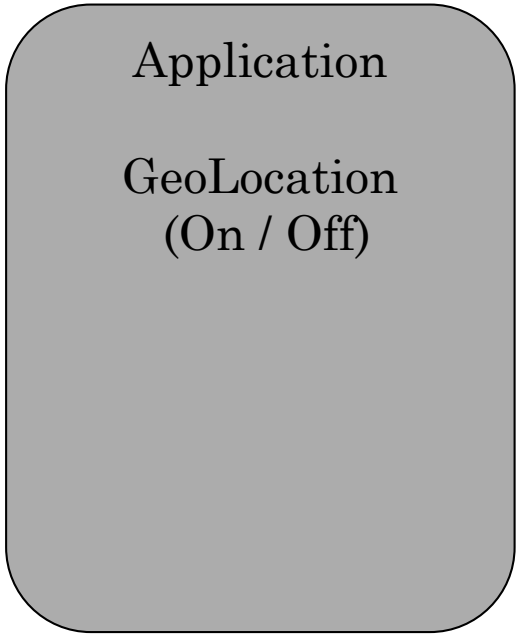
- So, we suppose GeoLocation via WiFi.

Algorithm


Launch an application for smartphone and tablet.
Switch on the GeoLocation.
Check and Register IP address to the room table of Labil.
Connect smartphone or tablet to Labil.
Detect Location.
send statement.
Switch the statement of student's attendance.

Launch an application for smartphone and tablet.

- To determine the user's IP address, an application for smartphone and tablet
- This application just uses for GeoLocation request to Labil.



Problem ~IP detection~

- Labli system should keep IP addresses. Then the system must check to match IP addresses between room table and smartphone or tablet IP addresses.

- Matching IP address method is under construction.

(→prepare ID and password…?)

Algorithm ~Detect Location~

def detectLocation()

l_{device}=get Latitude And Longitude

h_{device}=get Height Above Sea Level

l_{labil}=get Labil's Latitude And Longitude

h_{labil}=get Labil's Height Above Sea Level

d=computeDistance(l_{device}, l_{labil})

if d and $|h_{device} - h_{labil}|$ are approximately 0

return "In Lab"

else if (d is not 0.) && inUniv?

return "In the University"

else

return "Go home"

enddef