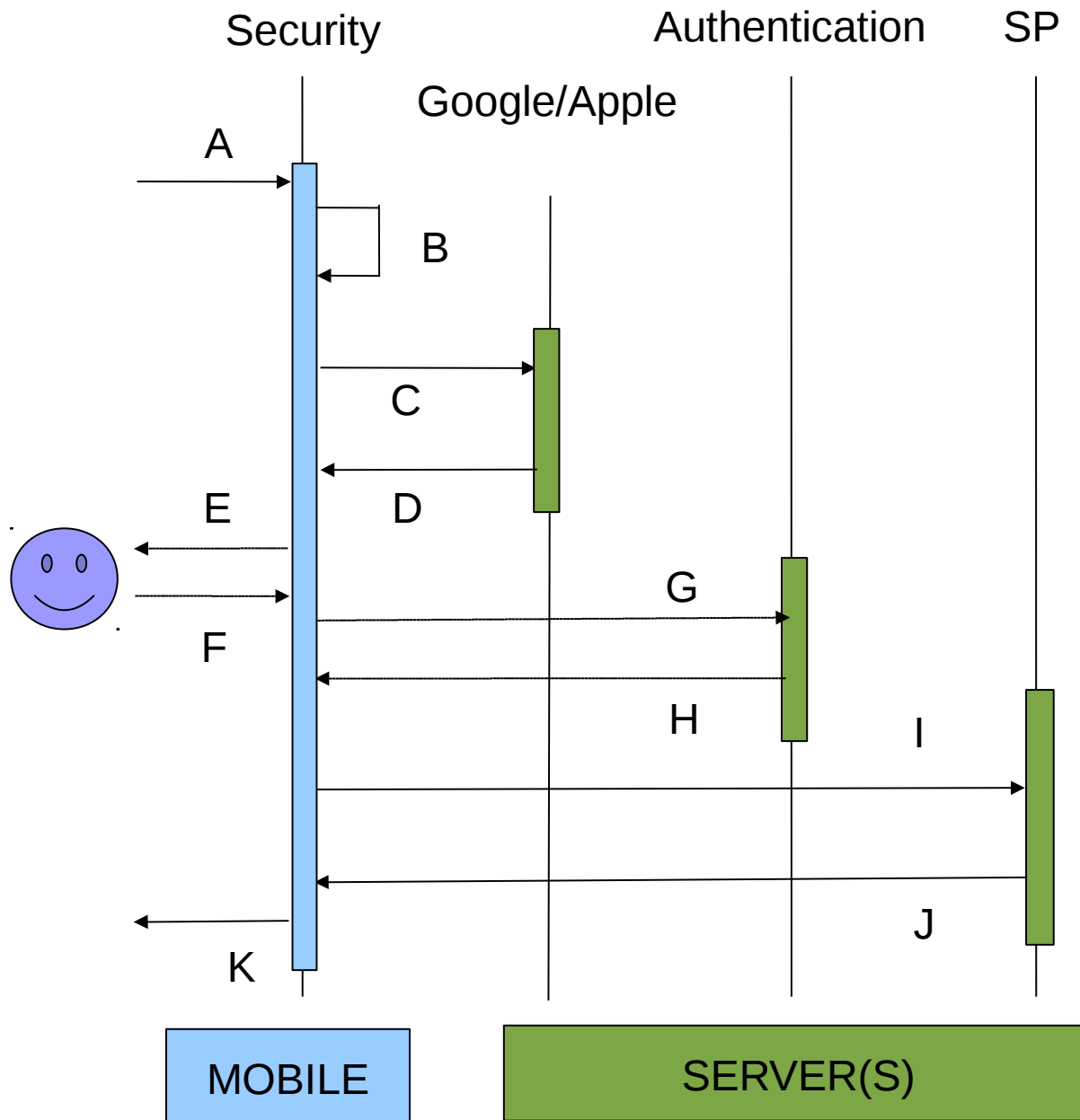


# BTH app

- SP = Student portalen.

# Registration

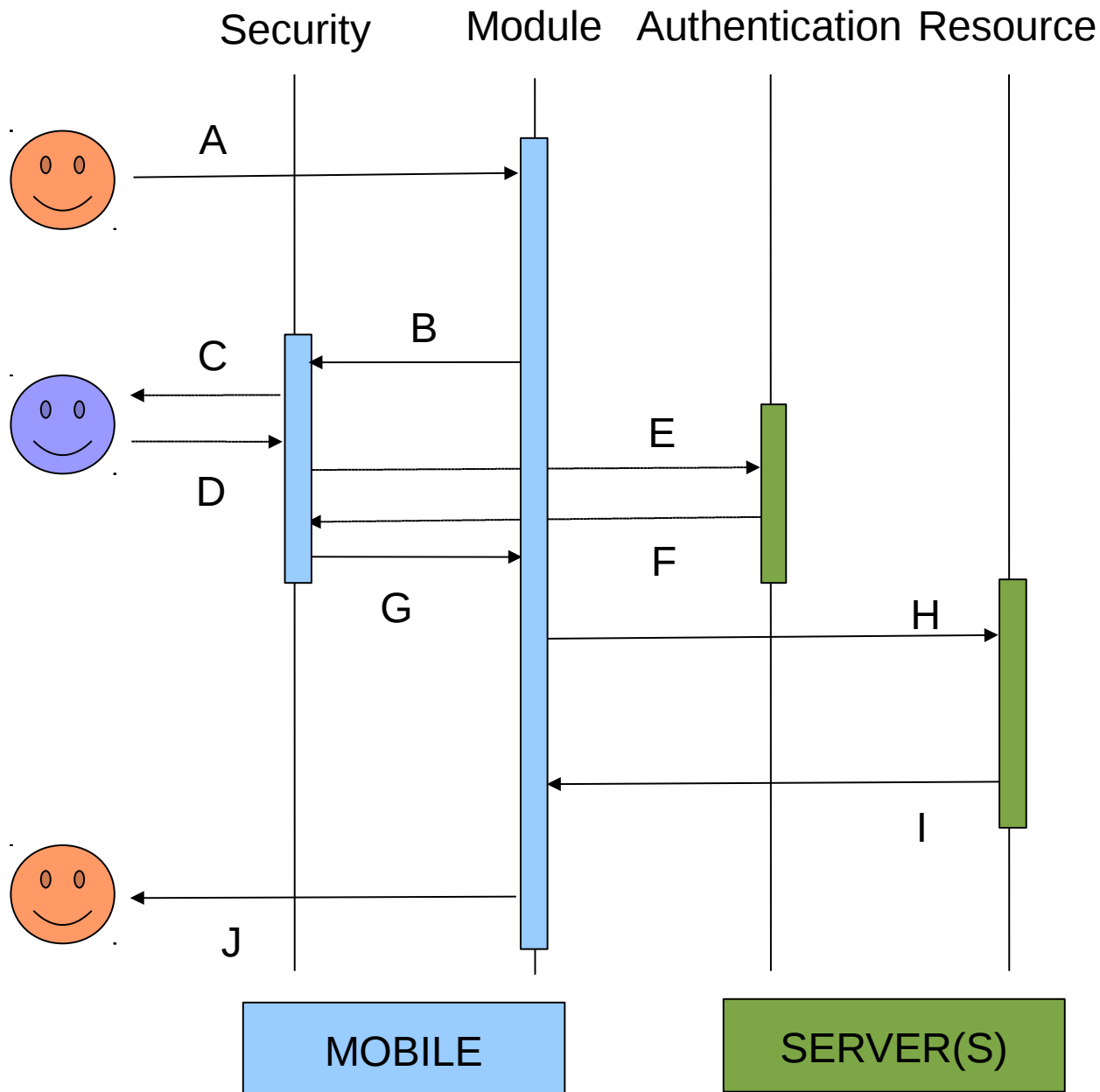
- Registration of mobile device on Authorization Server.
- Must be a valid SP user before doing this.
- User grants this device to receive push notifications and registers relation between user & device on server.



- A – Registration is initiated
- B – Produce device specific id for BTH app.
- C – Connect to Google/Apple
- D – Push Token is returned.
  
- E – If needed: The user is asked for credentials.
- F – User inputs credentials.
- G – If needed: Credentials and device specific ID is sent to authentication server.
- H – OAuth Token is returned to security.
- I – Registration of Push Token.
- J – Response with status.
- K – Module presents status to user.

# Security

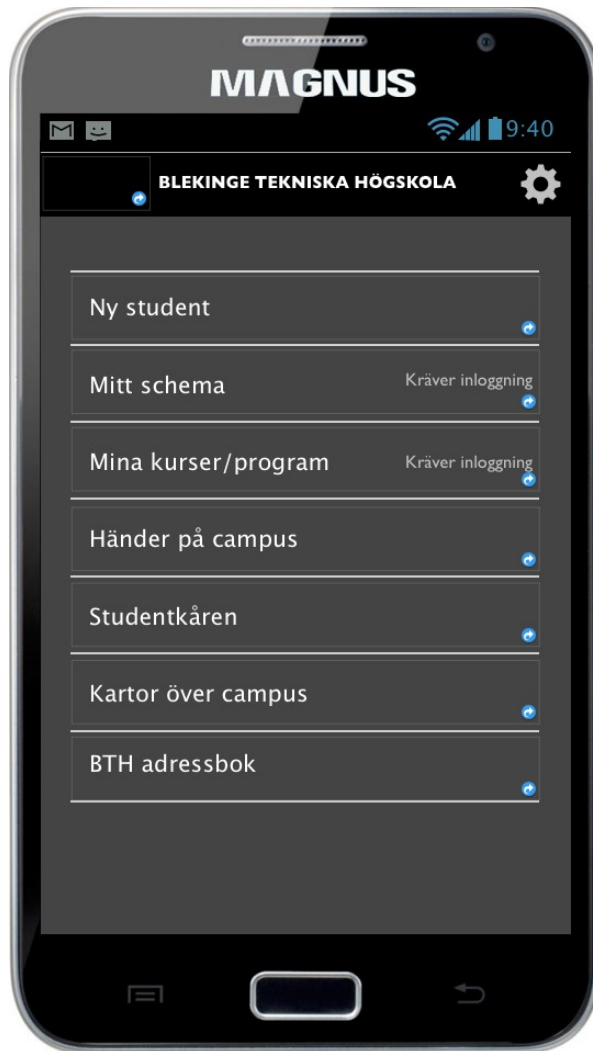
- Get Access Token from Authorization Server.
- Caches Access Token as long as needed (until explicit logout or token is timed out).
- Handles token state.
- Gets credentials from resource owner.



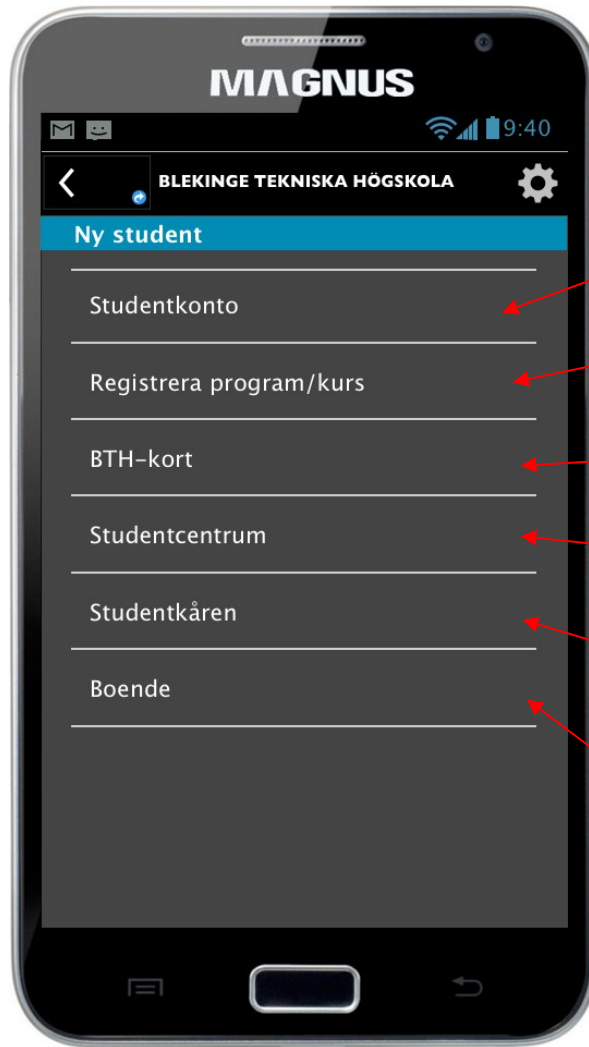
- A – User initiates sequence
- B – Module asks security for a valid token.
- C – If needed: The user is asked for credentials.
- D – User inputs credentials.
- E – If needed: Credentials and device specific ID is sent to authentication server.
- F – Token is returned to security.
- G – Token is returned to Module.
- H – Request is sent to resource server with Token.
- I – Response returned to module.
- J – Module presents Response to user.

# 1

- Text in Swedish and English.



# 2



- Info for new students.
- Text from SP
- Ladoc (through SP)
- Text from SP
- Text from SP
- Reference to xxx.
- Text from SP

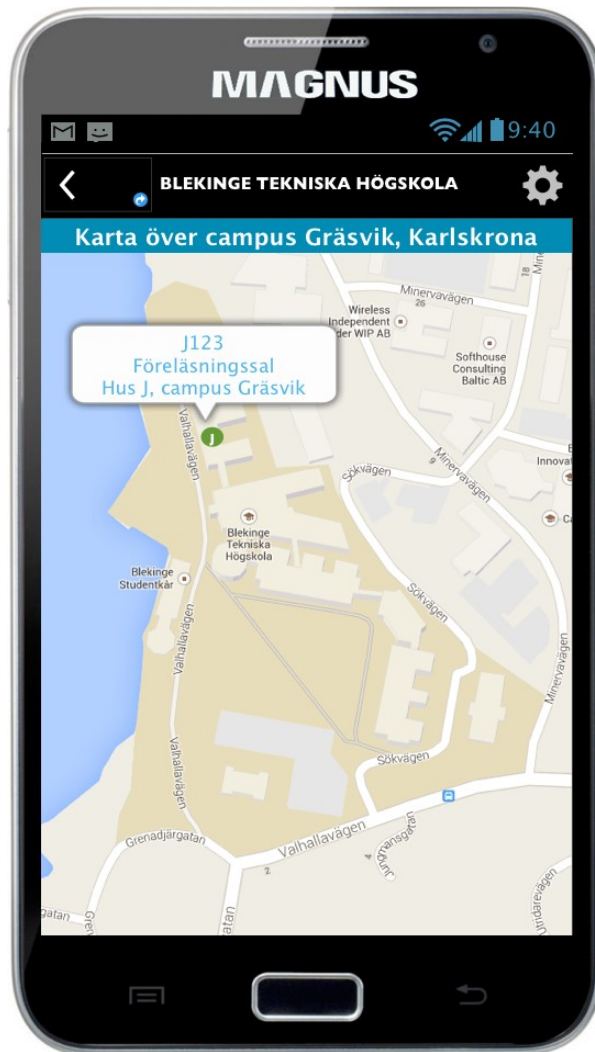
# 3



- Schema
  - Course title
  - Course code
  - Time
  - Location (room number)
  - Geographical location.
- Information from
  - Ladoc
  - TimeEdit



# 4



- Show location of room
  - lat/long
  - Room #
  - Description
  - House
- Information from
  - GIS

# 5



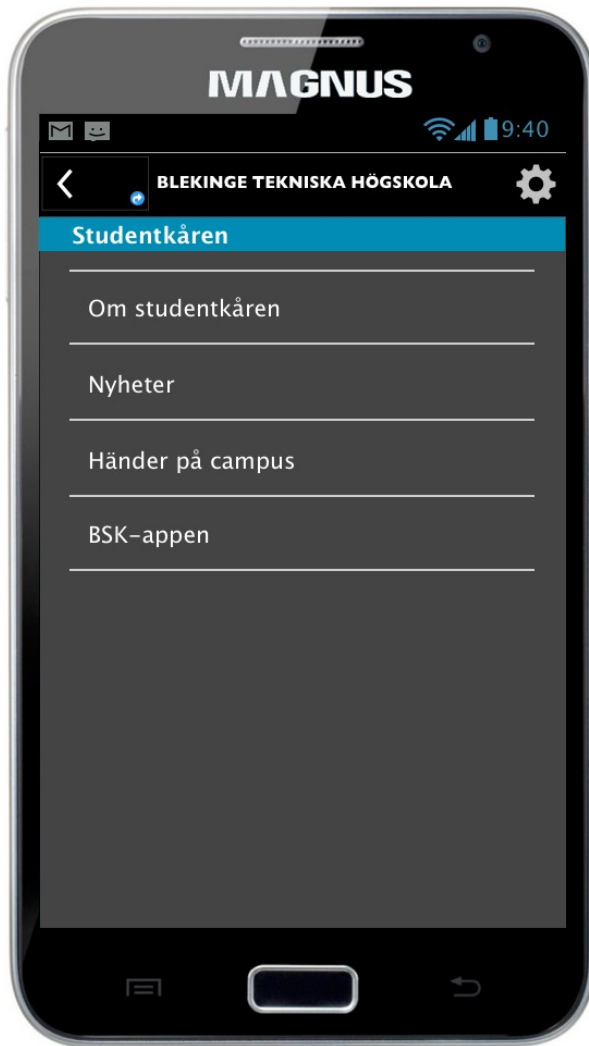
- Register on a new course.
- Get my courses
  - Name
  - Code
- Information from
  - Ladoc

# 6



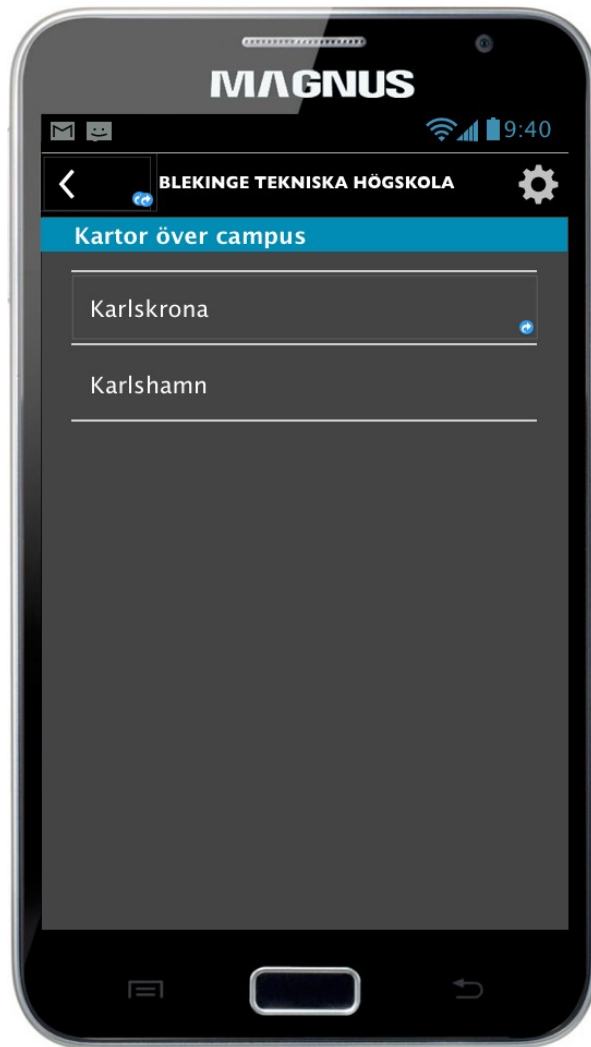
- Events on campus
  - Web page
  - PDF
  - RSS
- Information from
  - Smart sign

# 7



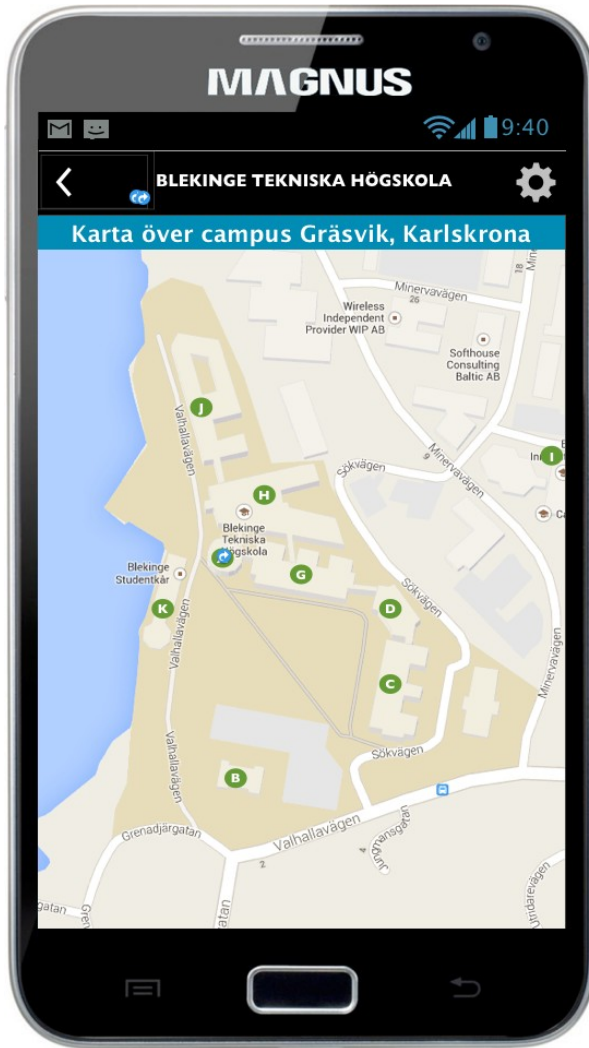
- 3 alternatives
  - Replace with link to web
  - Replace with intent to app
  - Merge from existing app.

# 8



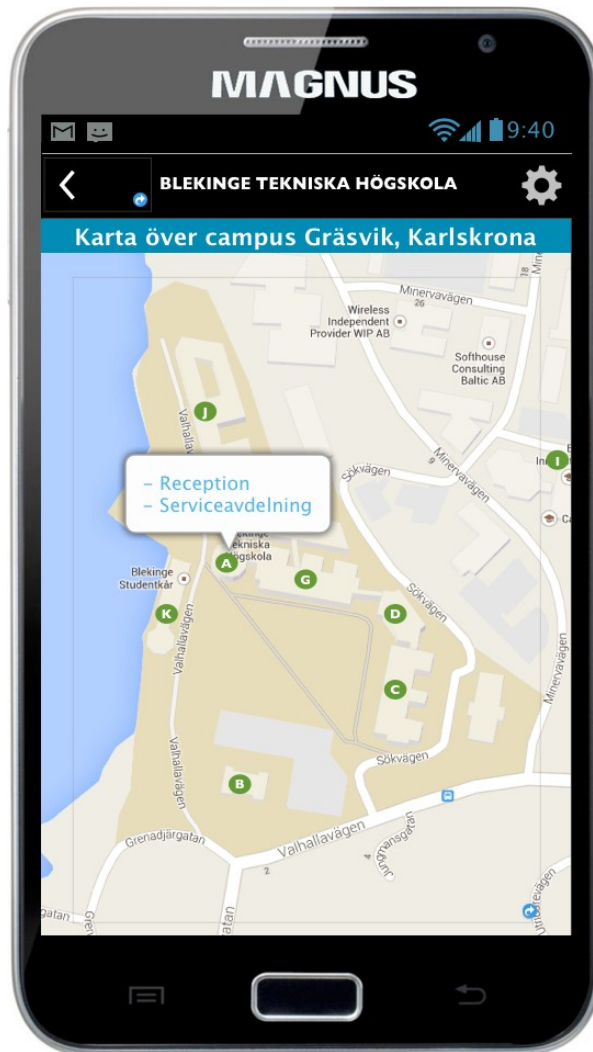
- Campus
  - Name
  - Location (rectangle)
  - Icon
- Information from
  - GIS

## 9



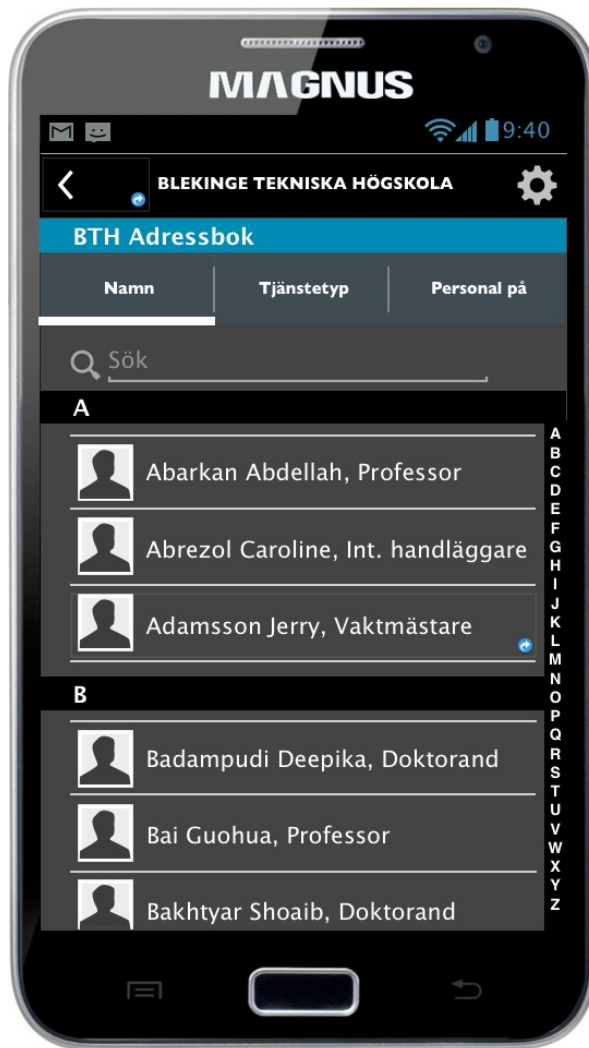
- Campus overview
  - Building
  - Description
  - Lat/long
- Information from
  - GIS

# 10



- Campus details
  - List of major departments.
- Information from GIS

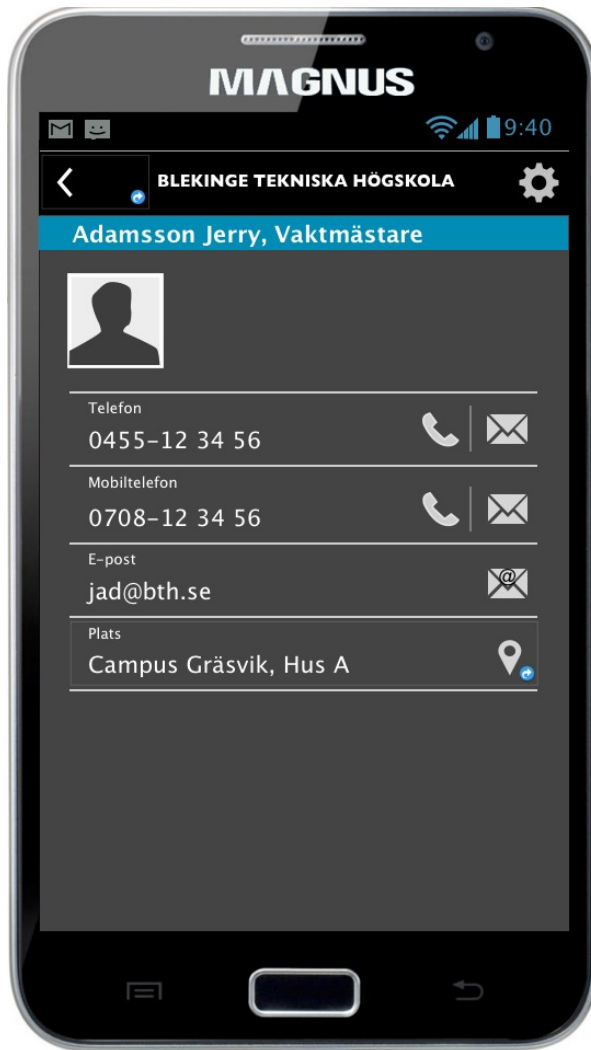
# 11



- Address book
  - Name
  - Title
  - Type
  - Organisational unit
- Information from
  - BTH address book



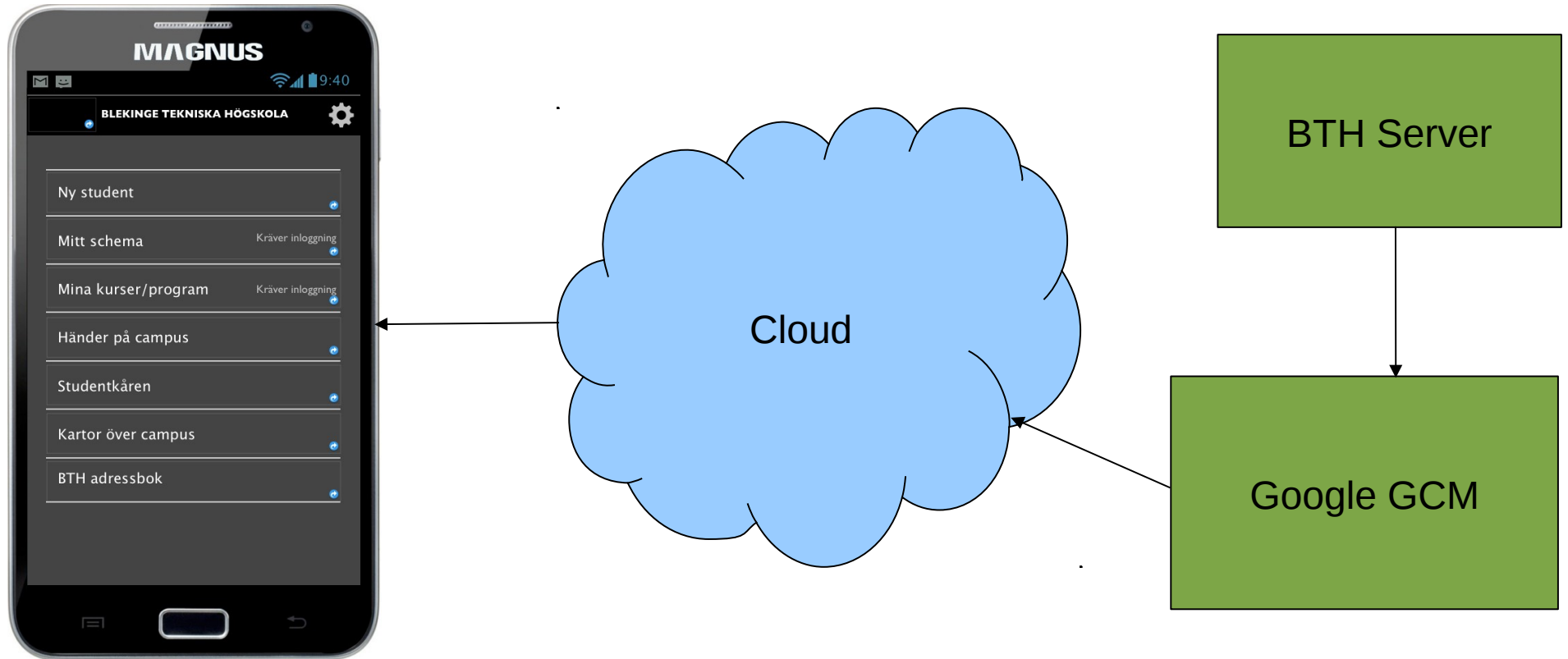
# 12



- Contact details
  - Name
  - Akronym
  - Mail
  - Phone
    - Mobile
    - Fixed
  - Homepage
  - Section/unit
  - Title
  - Location

# Push notifications – Google Cloud Messaging

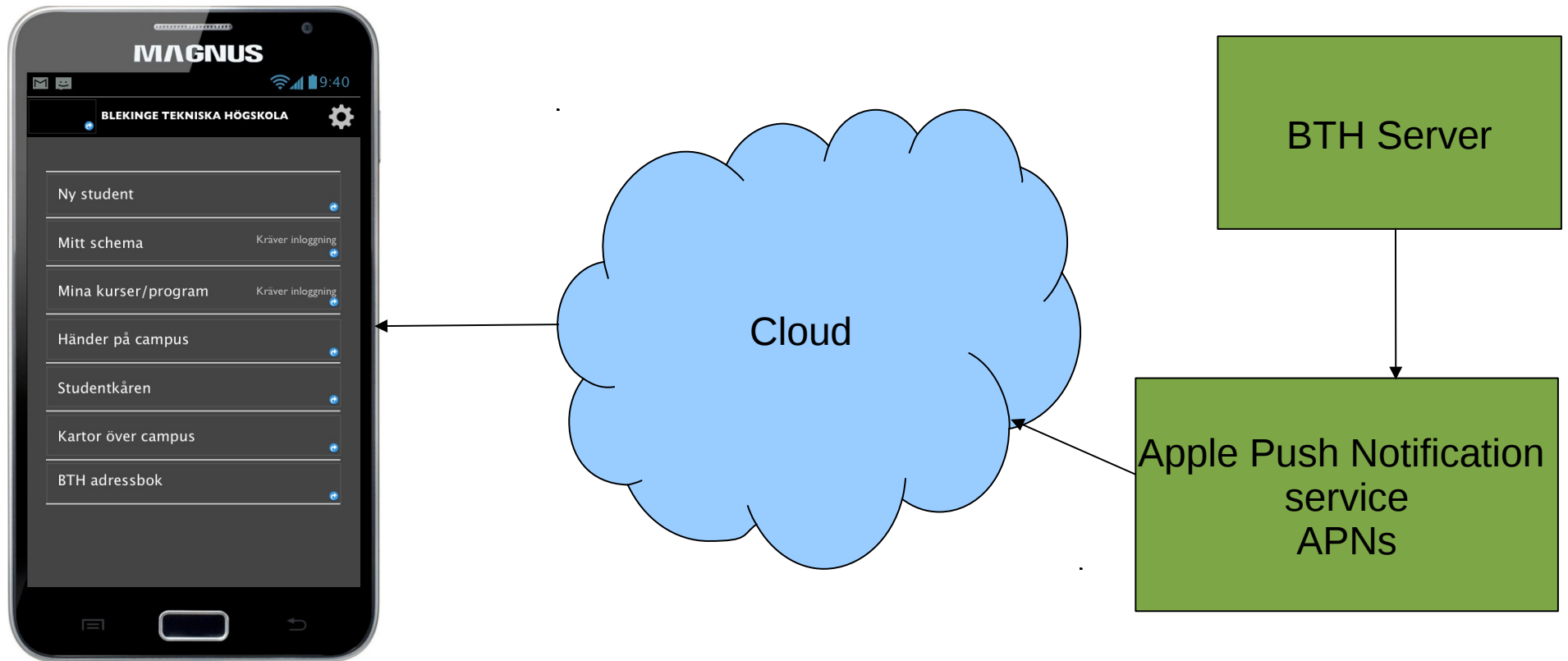
<http://developer.android.com/google/gcm/gcm.htm>



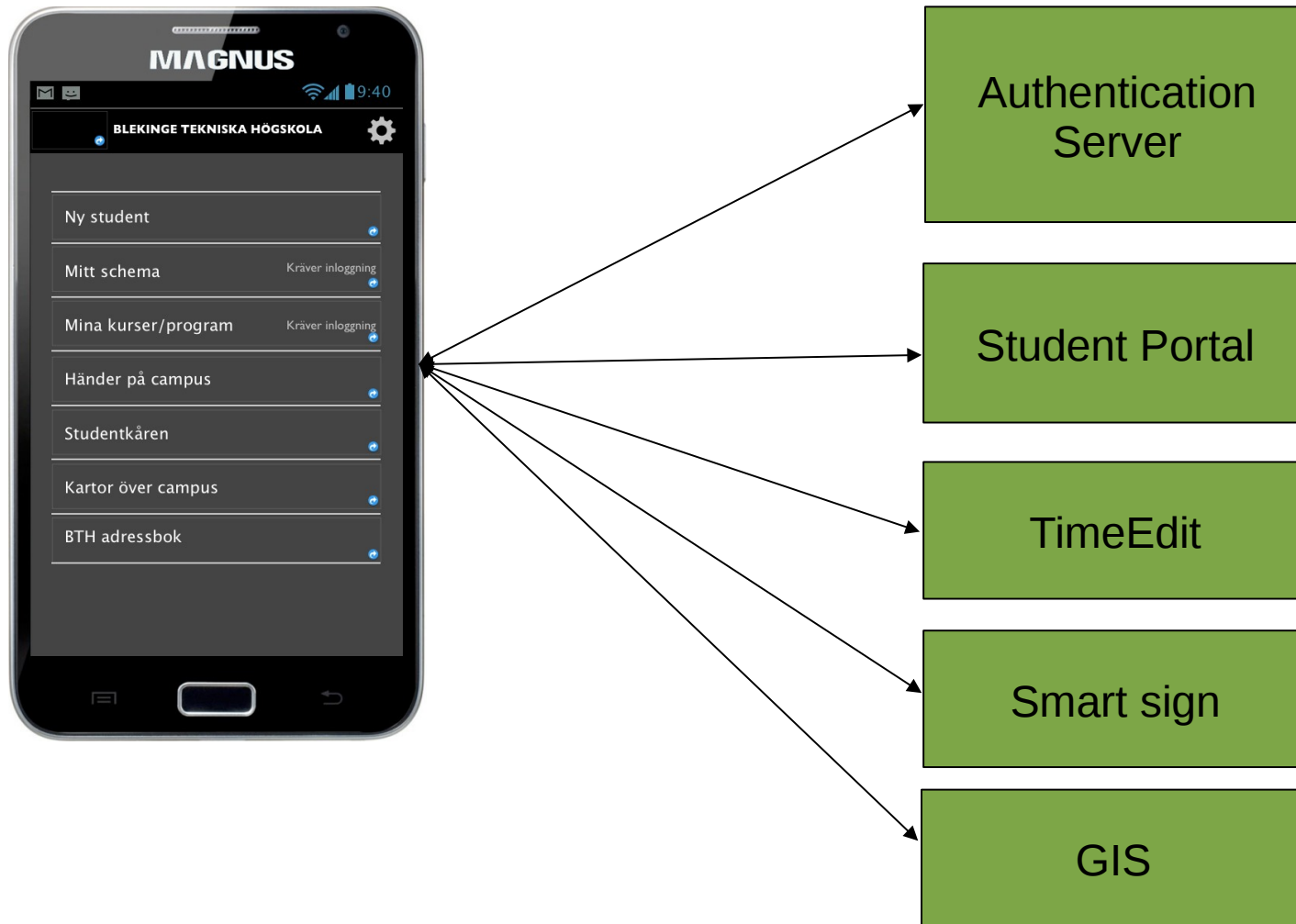
<http://developer.android.com/google/gcm/client.html>

<http://developer.android.com/google/gcm/server.html>

# Push notifications - Apple Push Notification Service



# Mobile and external systems



# Android

