Along with the new campus, Brac University is introducing a smart campus app for all the students which is a comprehensive tool that simplifies and enhances the student experience on campus. The student logs in to the app and selects the "Course Schedule" option. The app displays the student's current course schedule, including course names, faculties, locations, and links to course materials (if available). The student can see an interactive campus map with buildings. They can search for specific locations on the map, such as classrooms, libraries, and dining halls. The app provides indoor navigation capabilities to guide the student to their desired destination. A real time AR view might be possible if it is connected to an external AR-VR app.

The student can report any Incident to the security officer by including the details of the incident. They can attach photos or videos of the incident if present and submit it. A security officer receives an alert about the incident and responds to the location as quickly as possible. The student can view a comprehensive list of campus services and resources, including dining halls, libraries, student support services, career counseling, and more. The student can access detailed information about each service. The student receives push notifications about upcoming campus events, announcements, and important updates from OCR. The student can view a list of all past and upcoming events, including descriptions, dates, and locations.

Students can also provide feedback on the app's features, usability, and overall experience to the Registrar's office. The student can submit bug reports if there are any technical issues.

Finally, only graduate students can submit degree completion forms and download their transcript.

Now Design an Use-Case diagram based on the above scenario.

- **This is a tentative solution.**
- **Multiple solutions are possible.**
- **"AR-VR app" is an external system. So, it's an actor. But in the scenario, the use case of this actor is not clear enough. That's why if anyone does not include "AR-VR app" as an actor, it will also be correct.**
- **This solution has some nouns as use cases. For example, course name, faculties etc. These all should be started by a verb. For example, View course name, view faculties etc.**

Answer to question no.2

Brack Smart Campus App use case diagram

- Student
- Grad Student
- security officer
- OCR
- Registrar office

Use cases:
- Login
- Select course schedule
- View course details (<<includes>>)
  - View materials (<<extend>>)
  - Course name
  - Faculties
  - Location
- View map
- Search location (<<extend>>)
  - Classroom
  - Library
  - Dining hall
- Receive Alert
  - Respond to Alert (<<includes>>)
- View indoor Navigation (<<include>>)
  - View in AR (<<extend>>)
- Provide update
  - View Details (<<includes>>)
    - Describe
    - Date
    - Location
- include details
- Submit Report (<<includes>>)
  - Add photo/video (<<extend>>)
- View services (<<extend>>)
  - Dining hall
  - Library
  - Access details
  - Student support
  - Career course
- Recieve Notification (<<include>>)
  - Events
  - Announcement
  - Important update
- Provide feedback
  - Feature
  - Usability
  - Experience
- find tech issue (<<extends>>)
  - Report bug
- Submit degree completion form
- Download transcript