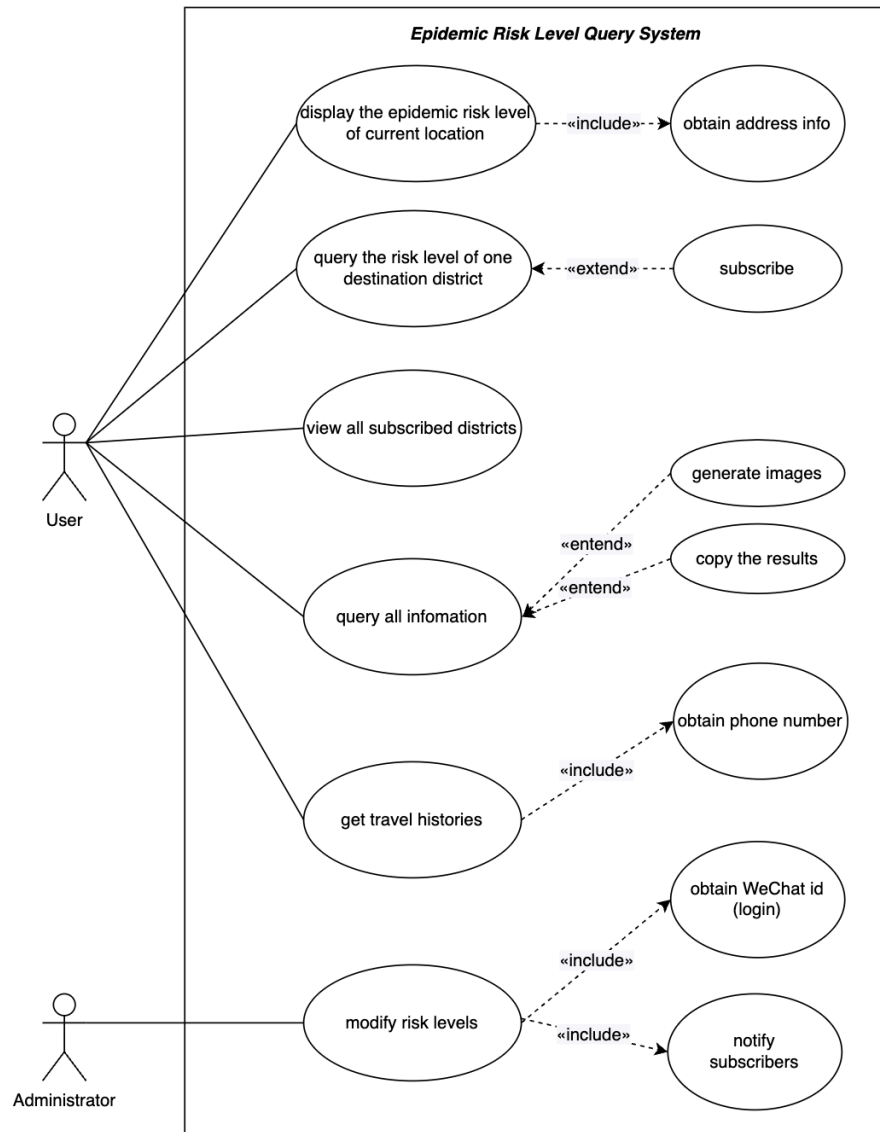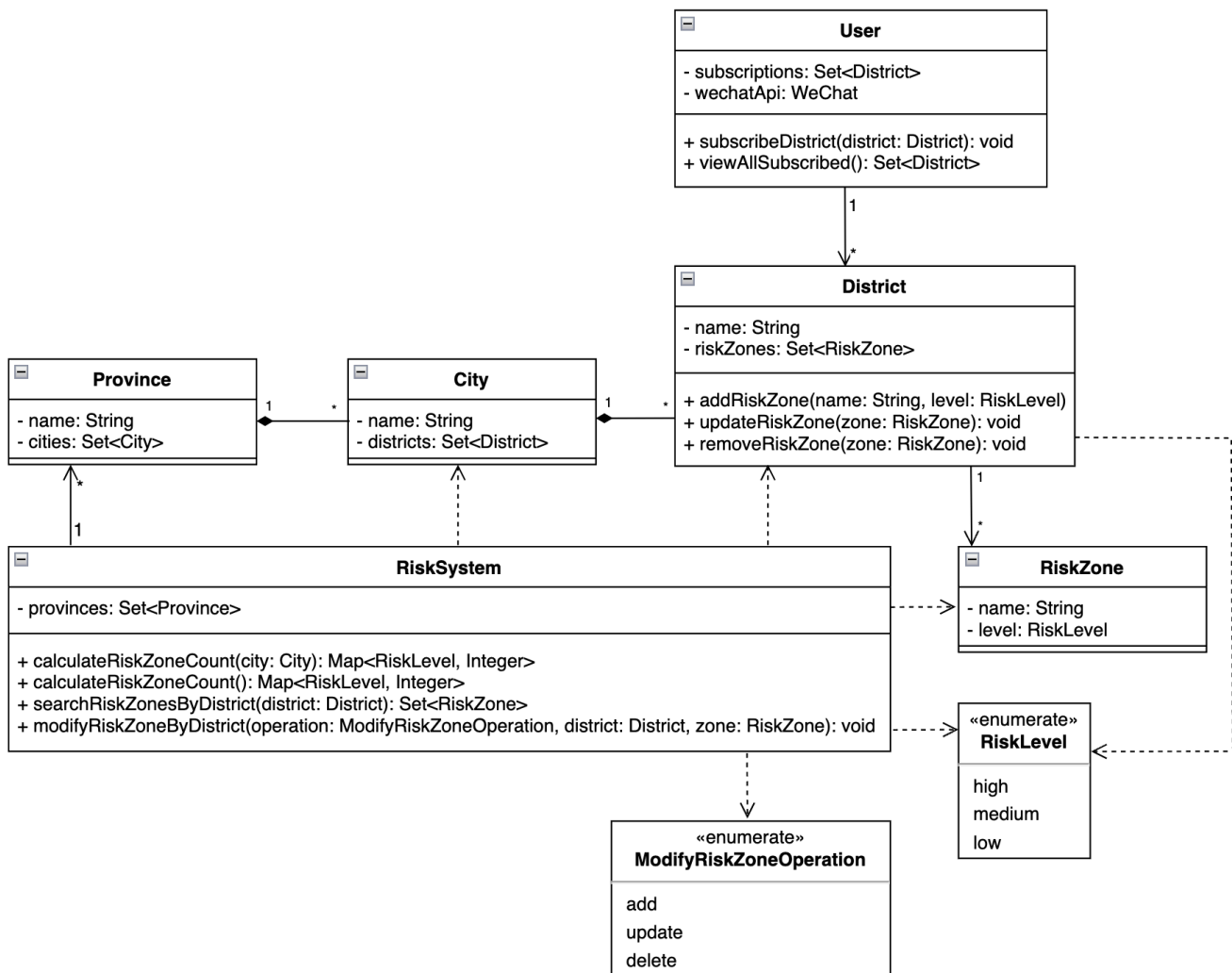# Assignment 1 - UML

Q. 1

The main use cases of *User* should also **include** the *obtain WeChat id (login)* use case, which is omitted above.

Q. 2

1. User object contains a *WeChatApi* that can provide informations such as phone number, locations for some of the above use cases to use.

2. Passing *RiskZone* as param to update/removeRiskZone may not be a good design, but it can still be realized by using databases or overriding the hashCode and equals method of RiskZone.

Q. 3

sd Change+Push Risk Level

Actors and objects: :Administrator, :AdminMainPage, :RsitSystem, distinct: Distinct, rz2: RiskZone, rz3: RiskZone, :User

- :Administrator → :AdminMainPage : wechatLogin()
- :AdminMainPage → :RsitSystem : verifyUserInfo()
- :RsitSystem ⇢ :AdminMainPage : return

opt [verification passed]
- :Administrator → :AdminMainPage : inputModificationArgs()
- :AdminMainPage → :RsitSystem : modifyRiskZoneByDistinct(operation, distinct, zone)

  alt
  [add]
  - :RsitSystem → distinct: Distinct : addRiskZone(zone.name, zone.level)
  - distinct: Distinct → rz1: RiskZone : create()
  - distinct: Distinct ⇢ :RsitSystem : return

  [update]
  - :RsitSystem → distinct: Distinct : updateRiskZone(rz2)
  - distinct: Distinct → rz2: RiskZone : modify()
  - rz2: RiskZone ⇢ distinct: Distinct : return
  - distinct: Distinct ⇢ :RsitSystem : return

  [delete]
  - :RsitSystem → distinct: Distinct : removeRiskZone(rz3)
  - distinct: Distinct → rz3: RiskZone : destroy()
  - distinct: Distinct ⇢ :RsitSystem : return

- :RsitSystem ⇢ :AdminMainPage : return

- :Administrator → :AdminMainPage : checkConfirm()

  alt
  [confirm]
  - :AdminMainPage → :RsitSystem : notifySubscribers()
  - :RsitSystem ⇢ :AdminMainPage : notified all subscribers
  - :RsitSystem → :User : sendNotification()

  [cancel]
  - :AdminMainPage → :RsitSystem : undo()
  - :RsitSystem → distinct: Distinct : undo()
  - distinct: Distinct ⇢ :RsitSystem : return
  - :RsitSystem ⇢ :AdminMainPage : return