

Applied Software Engineering

Assignment 1

12/20

21359035

Stefan M Ahmed

Intro

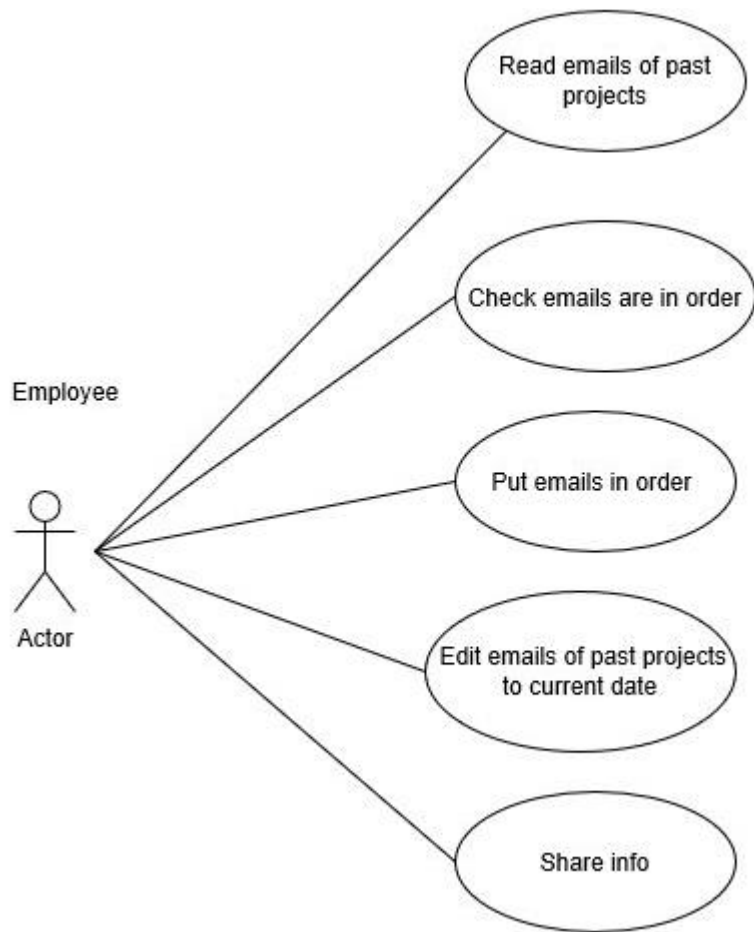
This is the first assignment of Software Engineering. This is about a public relations firm H&K. They were not doing well with their knowledge management system. They needed to get a new system that workers would do their project with.

Being a public relations firm that focuses on doing projects the employees in the firm need to keep dividing and passing information. Getting a new system to manage the knowledge with...

...manage the knowledge, share information involved reading emails which they needed to be put in order. Emails of previously done projects were not stored in the order they were expected to be stored. Software called Intraspect let people store in emails in the order they expected them to be stored in....

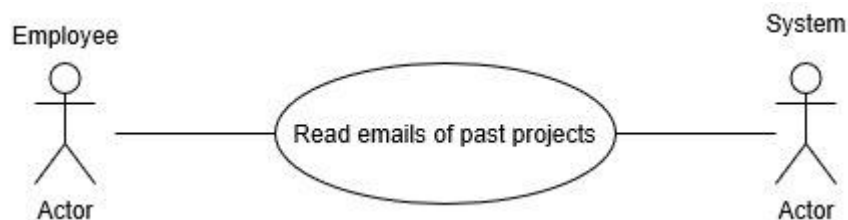
1.

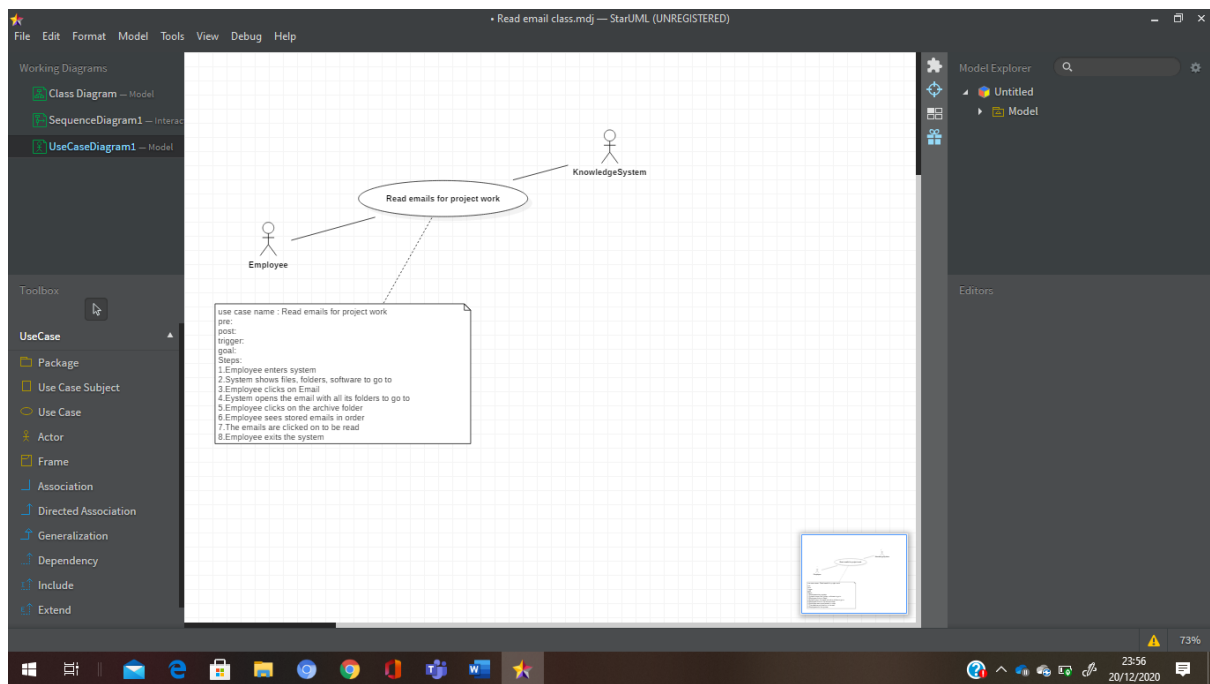
Use cases for employee



There are several use cases for the employee in this scenario. Being a public relations firm that is centred on a project the employee must share information with their clients. Being given the task to read the emails of previously done projects when given the project to do, there are several cases to come up with. The use cases are to do with this.

Use Case : Read emails of past projects for help with project





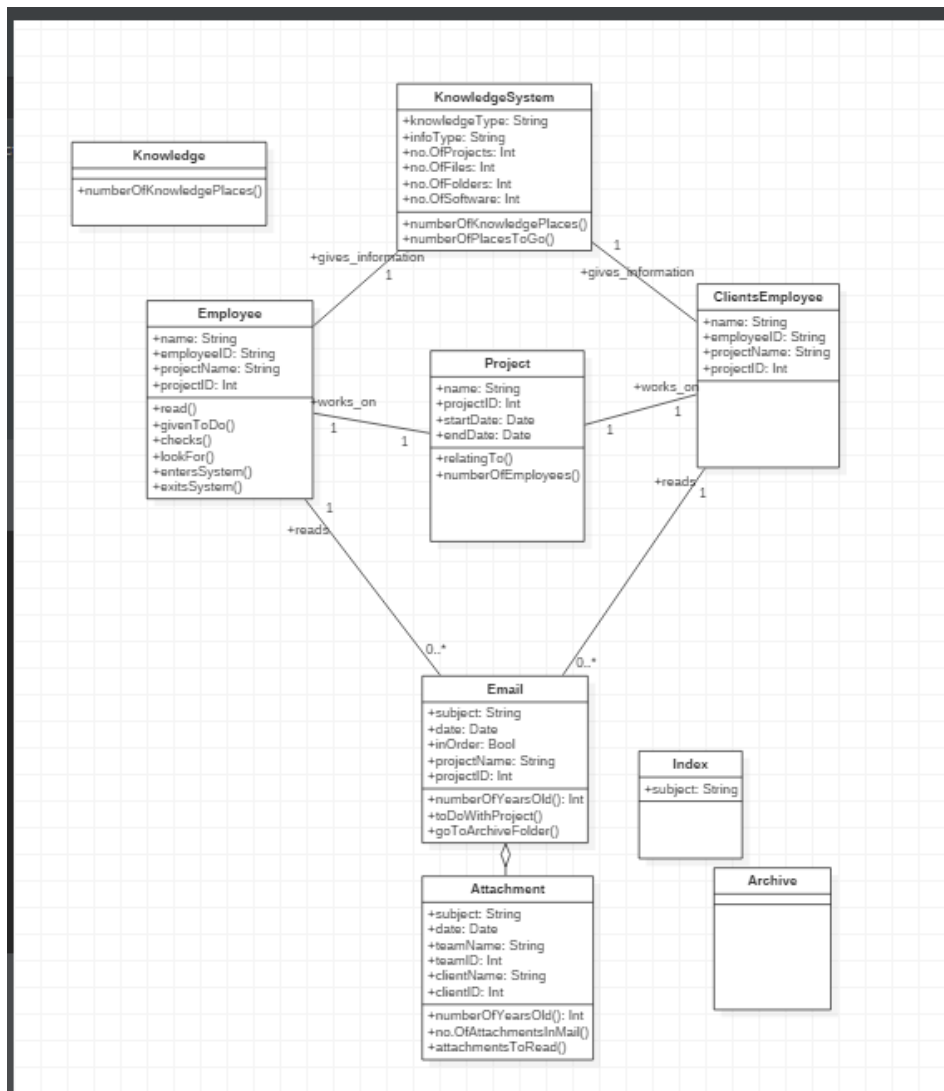
Use Case Description

Trigger : clicking on buttons to enter the system to go to the emails

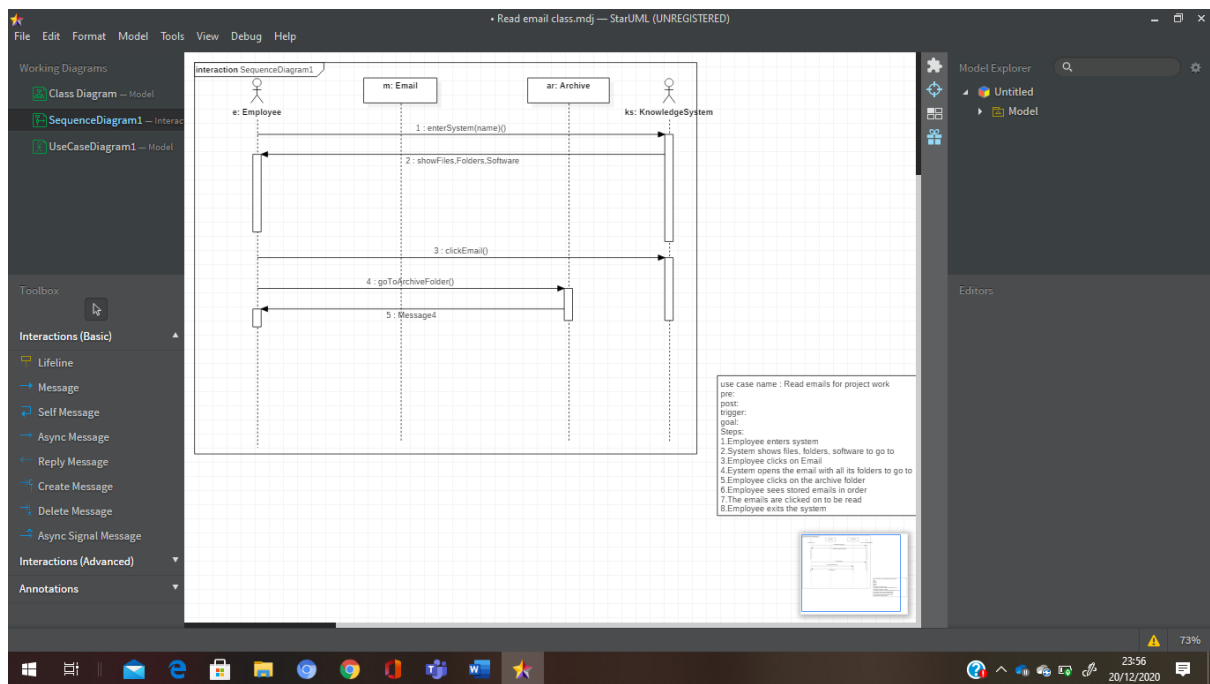
Precondition : Being given the project to work on

Goal : Complete project by reading the emails of past projects

Class Diagram – Read emails of past projects



Class diagram above shows the relationship between the classes for the use case. It includes the methods as operations. It includes the attributes of each class with their type such as String or Int. We then have the multiplicities showing the relationships between each class. If the relationship is one to one, one to many or zero to many.



Constraints - Business Rules, Logic

Constraints

no.of employees in the project team to be equal to or less then 10

context: Team

invariant: `name.no.ofEmployees->size <= 10`

Emails of past projects, which are dated up to two years ago, to be searched and read

context: Email

invariant: `date.numberOfWorkYearsOld->size <= 24`

Emails of past projects, which are dated up to twenty four months ago, to be searched and read

context: Email

invariant: `date.numberOfWorkYearsOld -> size <= 2`

The number of people given the same project to do is seven

`projectId->Size() = 7`

Each employee is given one project to do

context Employee

invariant `name.employeeID.projectGivenToDo = 1`

One project to be done by one team

context: Project

invariant: `name.doneBy()->size = 1`

The team works on one project

context: Team

invariant: teamName.projectName->works_On = 1

A connection to the network for Workers to pass Data over is good enough at a minimum speed of 14.4kbps

network.speed = 14.4

Workers let know they liked to have a system that makes them able to buy every type of knowledge in one place rather than several

context: Knowledge

invariant: type.knowledgePlacesAvailable->size()= 1

Technology can make things right if people are trained to get used to it

Employees can do the work they do each day and when employees leave the new employees can be trained if the firm needs to preserve its memory

Business Rules

- Give employees or their clients employees the task to read stored emails of past projects as soon as they are given the project to do
- Managers have to come up with ways to divide the bonuses they get, with their group. If their group does the most work, they get the bonus and have to decide how to divide it between them.
- Data in the system needs to be kept near to correct(accurate), be the data that helps (relevant) and needs to be for the current date (up to date)
- Managers of groups get bonuses if their team members participate the most in their project work
- Credit is given to those who do the most of their project work. Those, whose contributions get to the most by others, are listed as the "best sellers" by the company.

Logic

Reading the emails of projects done in the past to bring them up to date makes it easier for new employees to do their work. The price of training new employees goes down

Work in public relations firms focus on a project which means workers should share big numbers of information with H&K workers with knowing and understanding of doing jobs with clients in the same area

Workers should share big info with H & K workers with knowing and understanding of doing jobs with clients doing jobs on items in the same area

Workers should keep working with information with their clients by dividing it with them and letting them see it

An individual becomes known as an “expert” if he or she contributes the most to their project work