Complain Box

COMPONENT LEVEL DESIGN

Date: 4/10/18

Submitted to:

Md. Nurul Ahad Tawhid

Submitted by:

Atiq Ahammed 0817

Khayrul Islam 0822

Contents

Identified classes	2
Class Elaboration	
Analysis Classes	2
Design Component	
Elaborated Design Classes	4
Collaboration Details	
Attribute Elaboration	6
Description of Processing Flow	8
Behavior Elaboration	10

Identified classes

Using the requirements and architectural model, we identified all classes. There were some classes that was not described in requirements model and we also identified those classes at this level. After identification we got the following classes –

- ➤ User
- > Admin
- Notice
- ➤ ApplicationForm
- > Event
- > Institution
- > Problem

Class Elaboration

In this step, we analyze the identified classes, design their component and finally elaborate those design classes.

Analysis Classes

User
name email passward
authenticate() viewInformation() submitProblem()

ApplicationForm
applicationID filePath
addApplicationForm() viewApplicationForm() updateApplicationForm() downoadApplicationForm()

Admin
email password
updateSystemInformation() authenticate()

Event
eventID eventName eventPublishingDate eventDate eventTime eventDescription
createEvent() viewEvent()

Notice
noticeID noticeContent noticePublishingDate
createNotice() viewNotice()

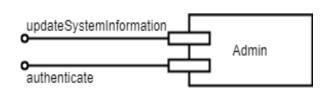
Institution
instituteName instituteLocation institutePhoneNumber institutionCategory
viewInstituteInformation() callToInstitute() addInstitute() updateInstitute()

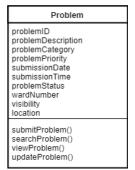
problemID problemDescription problemCategory problemPriority submissionDate submissionTime problemStatus wardNumber visibility location submitProblem() searchProblem() viewProblem()

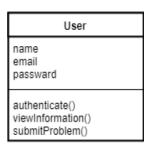
updateProblem()

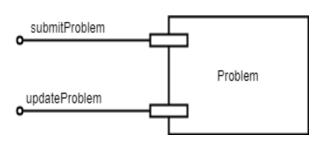
Design Component

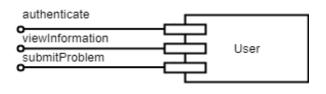




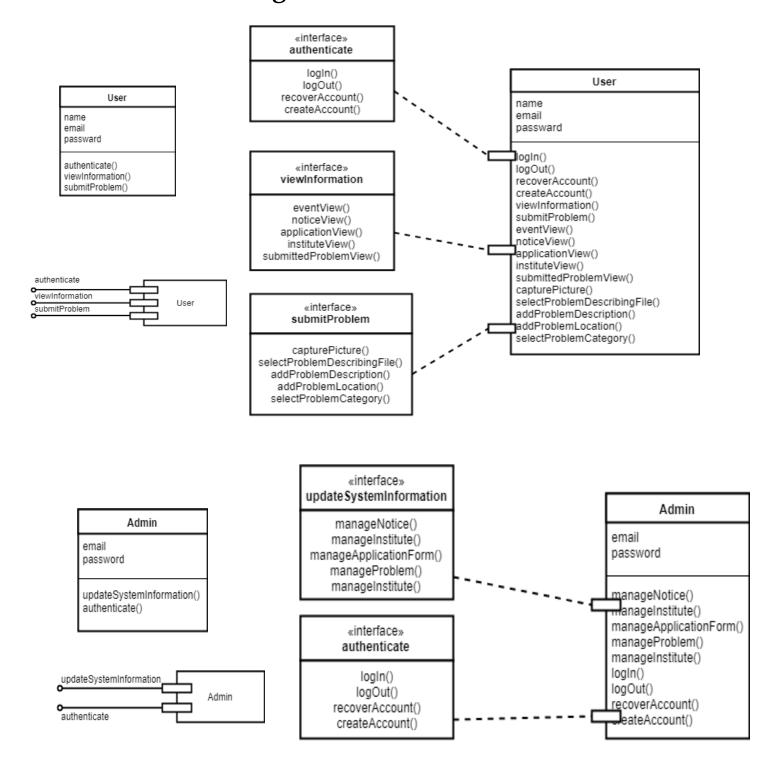


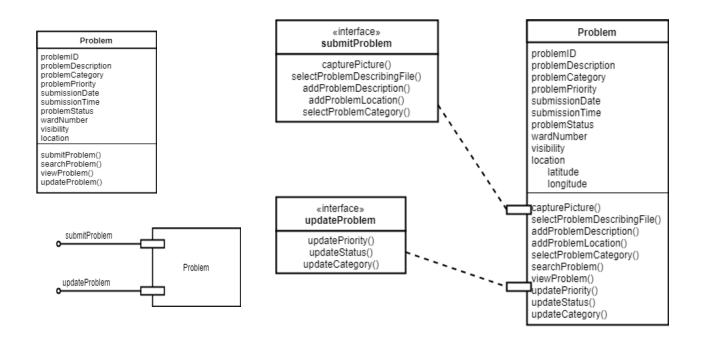




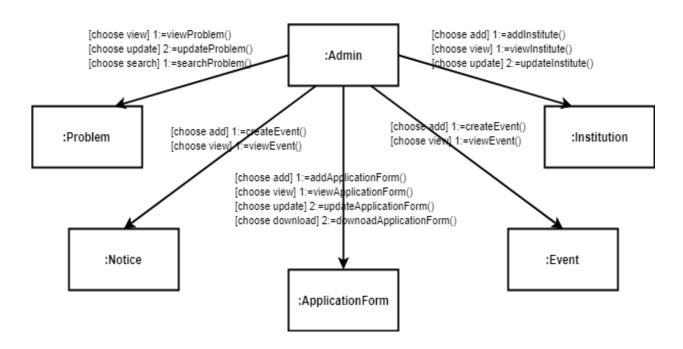


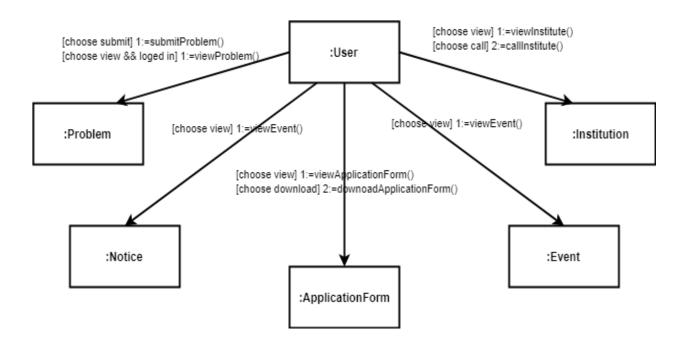
Elaborated Design Classes





Collaboration Details





Attribute Elaboration

Admin

email: string = khayrul.atiq@gmail.com {a valid email address} password: string = {at least 5 characters and at most 15 characters}

ApplicationForm

applicationID: string = {unique ID} filePath: string

Event

eventDate: string = {dd/mm/yyyy} eventTime: string = {hh:mm} eventDescription: string = {characters a-z, A-Z, 0-9 at most 500 characters}

Institution

instituteName: string = {characters a-z, A-Z, 0-9 at most 100 characters} instituteLocation

Latitude: double = 23.8103 {latitude of the location} Longitude: double = 90.4125 {Longitude of the location}

institutePhoneNumber: string = $\{^{(01)} + 88\}$?\\ d{11}}

institutionCategory: string = Hospital {Hospital, Fire Station, Police Station}

Notice

noticeID: string = {unique ID} noticeContent: string = {at most 500 characters a-z, A-Z, 0-9} noticePublishingDate: string = {dd/mm/yyyy}

Problem

problemID: string = {unique ID}

problemDescription: string = {at most 500 characters a-z, A-Z, 0-9}

problemCategory: string

problemPriority: integer = 0 {any value 0-10} submissionDate: string = {dd/mm/yyyy}

problemStatus: string = in consideration {in consideration, in progress, solved}

wardNumber: integer = 0 {1-56} Visibility: boolean = true {true, false}

Location

Latitude: double = 23.8103 {latitude of the location} Longitude: double = 90.4125 {Longitude of the location}

User

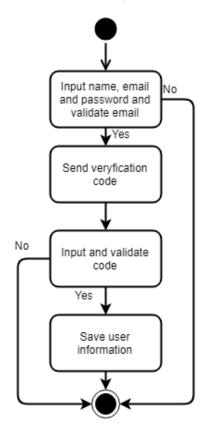
name: string = anonymous {character a-z, A-Z at most 20 character}

emai: string = example@gmail.com {valid email}

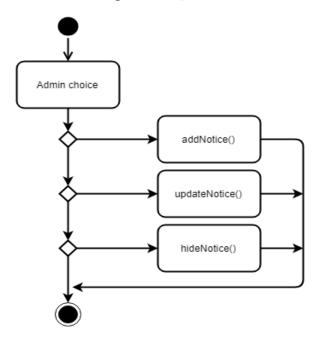
passward: string = {at least 5 characters and at most 15 characters}

Description of Processing Flow

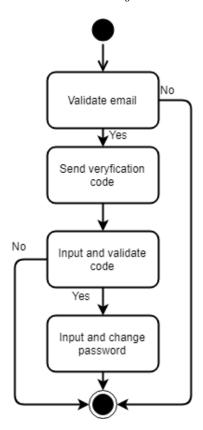
createAccount(): boolean



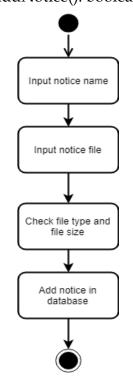
manageNotice(): boolaen



recoverAccount(): boolean

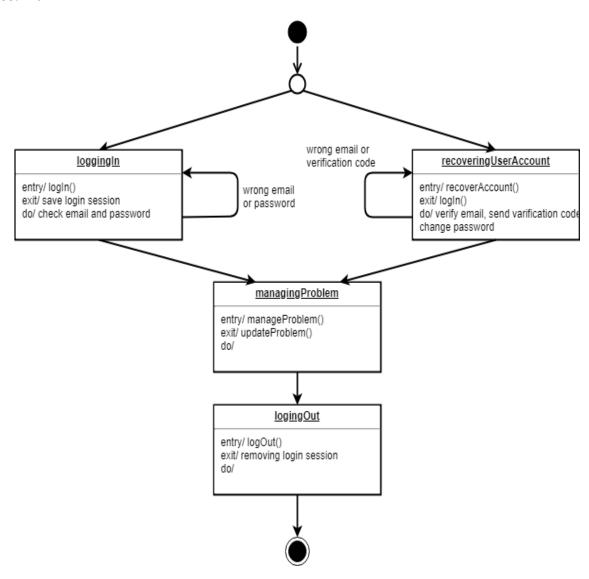


addNotice(): boolean

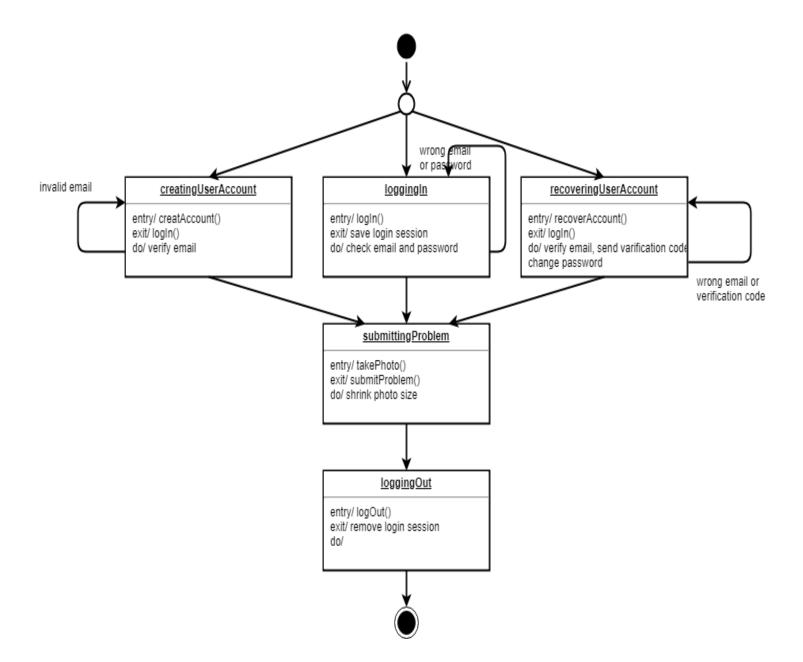


Behavior Elaboration

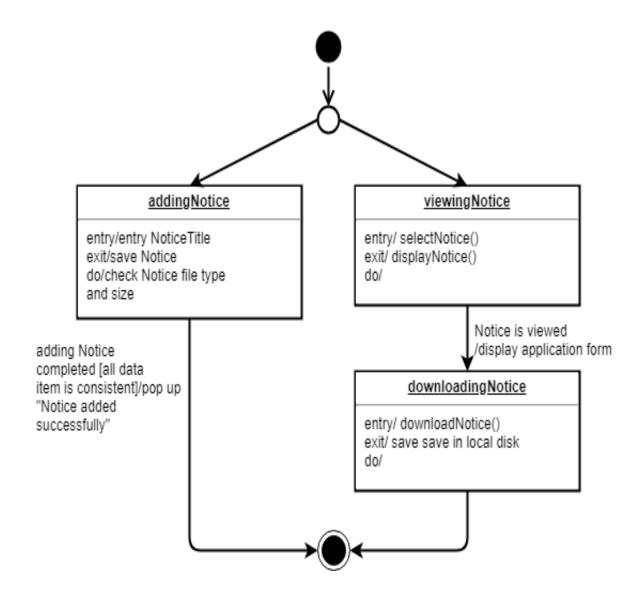
Class: Admin



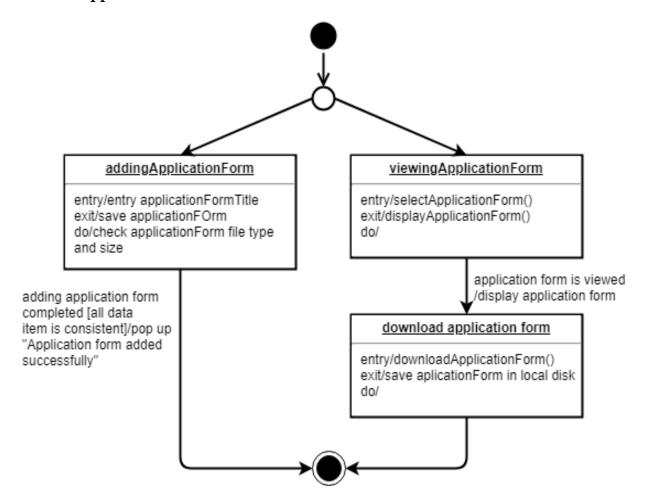
Class: User



Class: Notice



Class: ApplicationForm



Deployment Diagram

