# Assignment 38 pebj, smot

 $26.\ {\rm September}\ 2014$ 

# 1 Analysis Object Model (Static Model), including

#### 1.1 identifying entity, boundary, and control objects

Tabel 1.1 entity objects next 1.2

Entity Object	Attributes & Associations	Definition	
Account	• MaintainUsers		
	• ManageAccount	An account holds the identification and personal information about a user.	
	• AccountLogic		
	• ManageCalendar		
	• Event		
	• name		
	• email		
	• username		
	• password		
Event	• Account	The event entity describes an event in a calendar.	
	• Alert		
	• ManageEvent		
	• Description		
	• Date		
Alert	• Event	An alert holds the information for when a user should be notified about an specific event.	
	• alertionDate		
	• hasBeenSent		

Tabel 1.2 control objects next 1.3

Control Object	Attributes & Associations	Definition
	• LoginView	The login control object handles login and creation of an account
Login	AccountLogic	requested from Login- View, these actions will
		be performed by the re-
Server	• Event	lated AccountLogic.  The server is a static online accessable control (webservice etc.) that runs endlessly and regurally checks and sends out alerts to users about upcomming events.  ManageCalendar hand-
	• Account	les all actions done inside Calendar boundary. Any action that
ManageCalendar	• EventLogic	would involve an event change/retrival will be
	• Calendar	done though EventLo-
ManageAccount	<ul><li>Account</li><li>ManageAccountView</li></ul>	ManageAccount handles all actions done inside ManageAccount-View Boundary. Actions that accesses or changes an account will be done though AccountLogic.

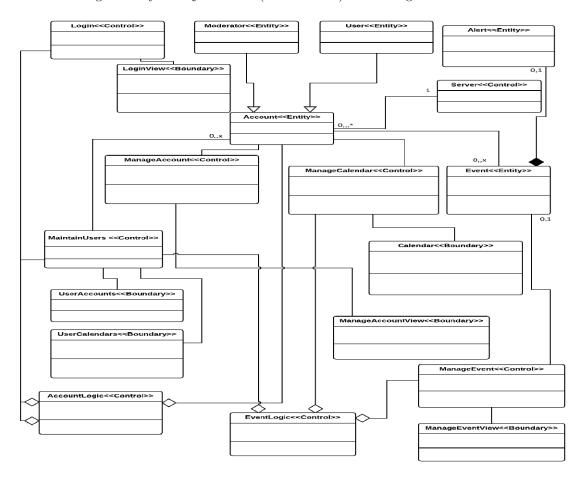
${f EventLogic}$	<ul><li>MaintainUsers</li><li>ManageCalendar</li><li>ManageEvent</li></ul>	EventLogic performs any activity that in- volves getting and changing event entities.
AccountLogic	ManageAccountView     Account	AccountLogic performs any activity that invol- ves getting and chan- ging Account entities.
MaintainUsers	<ul><li>AccountLogic</li><li>EventLogic</li><li>UserAccounts</li><li>UserCalendar</li></ul>	MaintainUsers and its related boundaries are reserved to the modera- tor. It allows him to ac- cess and moderate ac- counts and their events.
ManageEvent	<ul><li>ManageEventView</li><li>EventLogic</li><li>Event</li></ul>	ManageEvent handles activities done inside ManageEventView and uses eventlogic if an event has to be updated/added.

Tabel 1.3 boundary objects

Boundary Object	Attributes & Associations	Definition
LoginView	• Login	The login boundary allows the user a way to log into the system and also, to create a new account.
UserAccounts	• MaintainUsers	count.  MaintainUsers boundary allows a moderator to manage (access,edit,remove) user' accounts
	• Account	UserCalendars boundary allows a modera-
${\bf User Calendars}$	• EventLogic	tor to get a view over
	• Calendar	user' events and manage them.
${\bf Manage Event View}$	• ManageEvent	ManageEventView allows a user and mo- derator to create and edit events.
	• MaintainUsers	ManageAccountView allows a user to make
${\bf Manage Account View}$	• ManageCalendar	changes to the attri- butes of his account,
	• ManageEvent	with the exception of
Calendar	• ManageCalendar	username. Calendar allows a user to view and manage his personal calendar.

#### 1.2 Class Diagram

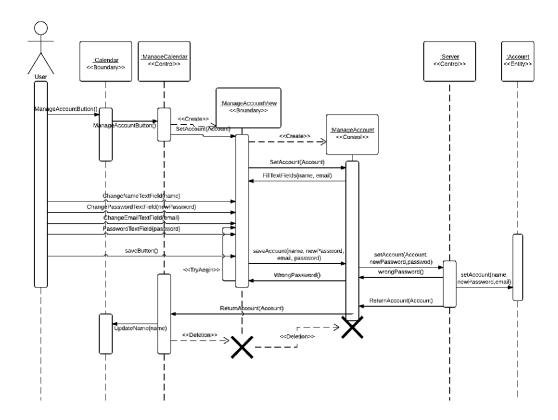
Abbildung 1: Analysis Object Model (Static Model) - class diagram.



#### 2 Dynamic Model, including

## 2.1 mapping use cases to sequence Sequence Diagrams involving entity, boundary, and control objects

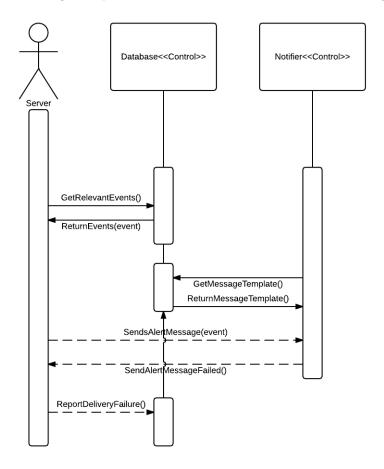
Abbildung 2: Sequence model for usercase "Edit personal information"



:ManageCalendar :Server <<Control>> :Calendar <<Control>> <<Boundary>> AddNewEventButton() AddNewEventButton() <<Create>> ManageEventView <<body><<br/>dary>> ReturnAccount(account) <<Create>> :ManageEvent <<control>> ChangeEventDiscriptionTextField() .<<Create>>- -ChangeEventDateTextField() ChangeEventDateTextField() EventDateCheck()\_ CheckedAlertEnabledCheckBox() ChangeAlertReceiveDate() eventDateOverlapsOtherDate() DateAvailable() AddEventButton() AddEventButton(discription, AddEventButton( date, alertEnabled) discription, date, alertEnabled) -ReturnEvent(event)-ReturnEvent(event) <<Create>> Update(event) <<Deletion>> <<Deletion>> Event

Abbildung 3: Sequence model for usercase "enable alert for event"

Abbildung 4: Sequence model for usercase "Sends a notification (event alert)"



## 2.2 modelling state-dependent behavior of individual objects using State Machine Diagrams

Abbildung 5: State Machine Diagram for "Send alert"

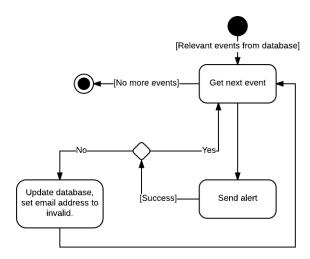


Abbildung 6: State Machine Diagram for "New event"

