Assignment 38

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# ${1} \quad {\bf Analysis\ Object\ Model\ (Static\ Model),\ including}$

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

Tabel 1.1 entity objects next 1.2

Entity Object	Attributes & Associations	Definition
Account	• MaintainUsers	
	• ManageAccount	
	• AccountLogic	An account holds the identification and personal information about a user.
	ullet 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
Login	<ul><li>LoginView</li><li>AccountLogic</li></ul>	The login control object handles login and creation of an account 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 han-
ManageCalendar	<ul><li> Account</li><li> EventLogic</li><li> Calendar</li></ul>	dles all actions done inside Calendar boundary. Any action that would involve an event change/retrival will be done though EventLogic
ManageAccount	<ul><li>Account</li><li>ManageAccountView</li></ul>	ManageAccount handles all actions done inside ManageAccountView Boundary. Actions that accesses or changes an account will be done though AccountLogic.

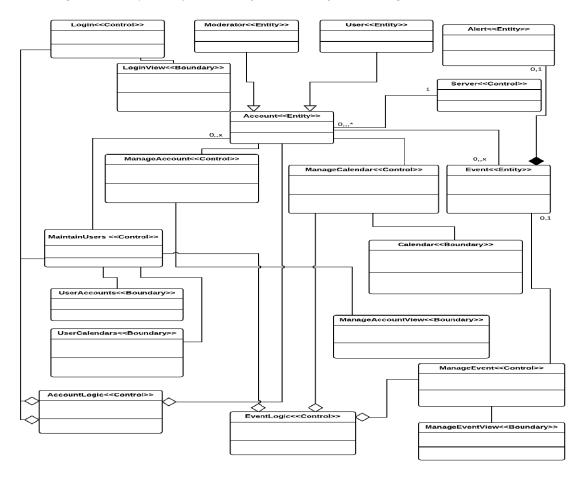
${\bf Event Logic}$	<ul><li> MaintainUsers</li><li> ManageCalendar</li><li> ManageEvent</li></ul>	EventLogic performs any activity that in- volves getting and changing event entities.
AccountLogic	<ul><li>ManageAccountView</li><li>Account</li></ul>	AccountLogic performs any activity that involves getting and changing Account entities.
${f Maintain Users}$	<ul><li>AccountLogic</li><li>EventLogic</li><li>UserAccounts</li><li>UserCalendar</li></ul>	MaintainUsers and its related boundaries are reserved to the moder- ator. It allows him to access 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 bound- ary allows a moder- ator to manage (ac- cess,edit,remove) user' accounts
	• Account	UserCalendars boundary allows a modera-
UserCalendars	• EventLogic	tor to get a view over
	• Calendar	user' events and manage them.
${\bf Manage Event View}$	• ManageEvent	ManageEventView allows a user and moderator to create and edit events.
	• MaintainUsers	ManageAccountView allows a user to make
${\bf Manage Account View}$	• ManageCalendar	changes to the attributes 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

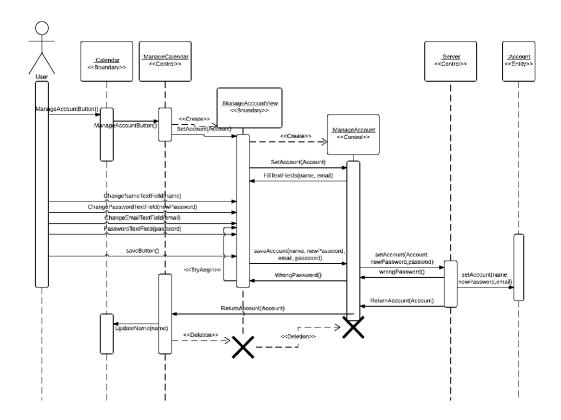
Figure 1: Analysis Object Model (Static Model) - class diagram.



### 2 Dynamic Model, including

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

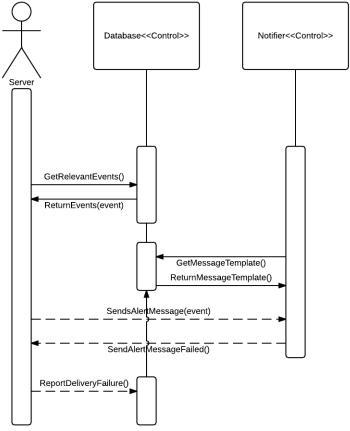
Figure 2: Sequence model for usercase "Edit personal information"



: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

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





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

Figure 5: State Machine Diagram for "Send alert"

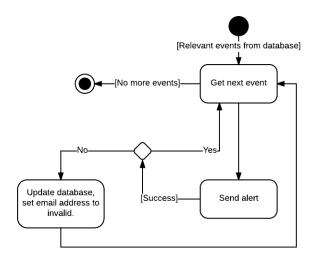


Figure 6: State Machine Diagram for "New event"

