User

-username : String-name : String-password: String

-messenger_list : ArrayList<String>

-events: ArrayList<String>

-messages_received: Map<String, ArrayList<String>>
-messages_sent: Map<String, ArrayList<String>>

+ User(un: String, pw: String)
+ setName(name: String)
+ getName(): String
+ getUsername(): String
+ getPassword(): String

+ addEvent(event_name : String)
+getEvents() : ArrayList<String>

+getMessages_received(): ArrayList<String>

+addMessenger(String un)

+getMessage_sent(un: String): ArrayList<String>

+canMessage(un: String): boolean

+addMessageReceived(un: String, mess_id: String) +addMessageSent(un: String, mess_id: String)

+getMessengerList(): ArrayList<String>

Attendee

+ Attendee(username: String, password: String)

Organizer

+ Organizer(username: String, password: String)

Speaker

-speakingAt: ArrayList<String>

+ Speaker(username: String, password: String)

+assignSpeaker(event_id: String): Boolean +removeSpeaking(event_id: String): Boolean

+getSpeakingAt(): ArrayList<String>

Message

-text: String-date: String-id: String

+Message(text: String)

+getText()

+toString(): String
+getID(): String

Room

-capacity: int

-eventsInRoom: List<String>

-name: String

+Room(name: String)

+setCapacity(newCapacity: int)

+getCapacity(): int
+getName(): String

+setName(newName: String) +addEventToRoom(eventName)

+getEventsInRoom(): ArrayList<String>

Event

-name: String-place: String

-start_time: Calendar -end_time: Calendar -speaker: String -description: String

-limit: int

+attendee_list: ArrayList<String>

+Event(name: String, place: String, speaker: String, description: String, start_time:

Calendar, end time: Calendar)

+getLimit(): int

+setName(name: String) +setPlace(place: String) +setSpeaker(speaker: String)

+getName(): String +getPlace(): String +getSpeaker(): String +getDescription(): String +getStart_time(): Calendar +getEnd_time(): Calendar

+getAttendee_list(): ArrayList<String>

+is_full(): boolean
+toString(): String

UserAccount

idToMessage: Map<String, Message> idToAttendee: Map<String, Attendee> idToSpeaker: Map<String, Speaker> idToOrganiser: Map<String, Organiser>

+ eventManager: EventManager

+UserAccount()

+seeScheduleEvents(username: String):

String

+isAvailable(username: String, event name:

String): Boolean

+createMessage(text: String): Message

<<MessageManager>>

+sendTo(from: String, to: String, m id: String)

+viewMessages(u1: String, u2: String): ArrayList<String>

AttendeesAccount

+AttendeesAccount()

+canSignUp(username: String, event_name: String): Boolean +canDeleteEvent(username: String, event_name: String):

Boolean

+sendTo(from: String, to: String,

m_id: String)

+viewMessages(u1: String, u2: String): ArrayList<String> +addAttendee(un: String, pw:

String)

+addMessenger(u1: String,

u2:String

SpeakerAccount

+SpeakerAccount()

+addSpeaker(username: String,

password: String)

+speakerExists(username:

String): Boolean

+getEvents(username: String):

ArrayList<String>

+addEventToSpeaker(username:

String, event: String)

+messageEventAttendees(from:

String, event_name: String,

m id: String)

+sendTo(from: String, to: String,

m_id: String)

+viewMessages(u1: String, u2: String): ArrayList<String>

OrganizerAccount

+OrganizerAccount()

+addOrganizer(username: String,

password: String)

+sendToSpeakers(from: String, m id:

String)

+sendToAttendees(from: String, m_id:

String)

+canSignUp(username: String, event_name: String): Boolean +canDeleteEvent(username: String, event_name: String): Boolean

+sendTo(from: String, to: String, m_id:

String)

+viewMessages(u1: String, u2: String):

ArrayList<String>

RoomManager

- -nameToRoom: Map<String, Room>
- +RoomManager()
- +doesRoomExist(roomName: String): Boolean
- +addRoom(roomName: String)
- +removeRoom(roomName: String): Boolean
 +getEvents(roomName: String): ArrayList<String>
 +addEventToRoom(room: String, eventName: String)

EventManager

EventList: Map<String, Event>

- +EventManager()
- +update_attendees(event: Event, name: User)
- +update_events(event: Event)
- +isConflicting(events: ArrayList<String>, startTime: Calendar, endTime: Calendar): Boolean
- +createEvent(eventName: String, roomName: String, speakerName: String, description:
- String, startTime: Calendar, endTime: Calendar)
- +addEvent(event: Event)

AttendeeController

-username: String

-attendeesAccount: AttendeesAccount

-eventManager: EventManager

-attendeePresenter: AttendeePresenter

-commonPrintsPresenter: CommonPrintsPresenter

-sc: Scanner

+AttendeeController(username: String)

+chooseAction()

+callSignUp(username: String, event_name: String)
+callDeleteEvent(username: String, event_name: String)

+viewScheduledEvents(username: String): String

+viewAllEvents(): String

+callSendTo(a1: String, a2: String, text: String): String +callViewMessages(a1: String, a2: String): ArrayList<String>

+createNewAccount(username: String, password: String)

+callAddMessenger(u2: String)

OrganizerController

-username: String

-sa: SpeakerAccount

-em: EventManager

-rm: RoomManager

-oa: OrganizerAccount

-op: OrganizerPresenter

-cpp: CommonPrintsPresenter

-sc: Scanner

+OrganizerController(username: String)

+chooseAction()

+returnTimeSegment(input: String, start: int, end: int): int

+getTimeInput(start: Boolean): Calendar +getValidInput(min: int, max: int): int

+createNewAccount(username: String, password: String)

+callSignUp(username: String, event_name: String)

+callDeleteEvent(username: String, event_name: String)

+enterRoomIntoSystem(roomName: String)

+deleteRoomFromSystem(roomName: String)

+createSpeakerAccount(username: String, password: String)

+scheduleSpeaker(eventName: String, speakerUserName: String, startTime: Calendar, endTime: Calendar,

room:String, description: String)

+sendToAllSpeakers(text: String): String

+sendToAllAttendees(text: String): String

+callSendTo(a1: String, a2: String, text: String): String

+callViewMessages(a1: String, a2: String): ArrayList<String>

SpeakerController

-username: String

-speakerAccount: SpeakerAccount -eventManager: EventManager -speakerPresenter: SpeakerPresenter

-commonPrintsPresenter: CommonPrintsPresenter

+SpeakerController(username: String)

+chooseAction()

+createNewAccount(username: String, password: String)

+viewScheduledEvents(username: String): String

+callMessageEventAttendees(event: String, text: String) +callSendTo(a1: String, a2: String, text: String): String

+callViewMessages(a1: String, a2: String): ArrayList<String>

TechConferenceController

-sg: SerializerGateway

-ua: UserAccount

-em: EventManager

-commonPrintsPresenter: CommonPrintsPresenter

-ac: AttendeeController -oc: OrganizerController

-scon: SpeakerController

+TechConferenceController()

+mainMenu()

+login(username: String, password: String): Boolean

+populate maps(ArrayList<User> array)

+logout()

CommonPrintsPresenter +CommonPrintsPresenter() +printInvalidOption() +printWelcomeMenu() +printSuccessfulLogin() +printRequestPassword() +printInvalidLogin() +printMessageSent() +printMessageSendingFailure() +printEnterOption() +printEnterNumber(min: int, max: int) +printLoggedOut() +printAllEvents(allEvents: String) +printSuccessfulSignUp() +printFailedSignUp() +printSuccessfulDeletion() +printFailedDeletion() +printSuccessfulAccountCreation() +printNoEventsScheduled() +printMessageText() +printMessageUserName() +printViewMessageUserName() +viewMessages(messages: ArrayList<String>) +printEventName() +printSend() +printEventNotFound()

+AttendeePresenter() +chooseActionText() +printEventName() +printUsername() +printUsernameView() +printUsernameHistory() +printSend() +printAddMessagable() +printSuccessfulAdd()

+SpeakerPresenter() +chooseActionText() +printSned() +printEventName() +printUsername() +printUsernameView()

OrganizerPresenter

- +OrganizerPresenter()
- +printActionText()
- +printSpeakerDNE()
- +printRoomDNE()
- +printEventClash()
- +printSuccessfullyScheduled()
- +printSpeakerAdded()
- +printRoomAddName()
- +printRoomDeleteName()
- +printSpeakerName()
- +printSpeakerPassword()
- +printDescription()
- +printRoomName()
- +printTimeInput(Boolean start)

SerializerGateway

- -EM: EventManager
- -UA: UserAccount
- +SerializerGateway()
- +readFromUN(path: String): ArrayList<User>
 +readFromEvent(path: String): ArrayList<Event>
- _readFromMessages(path: String): ArrayList<Message>
- +WriteToFile(path: String)