**EventService** «interface»

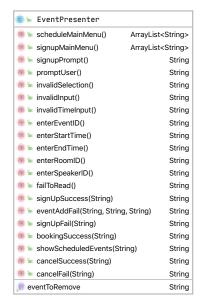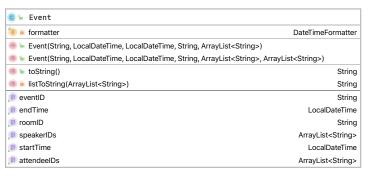| | |
|---|---|
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, String) | boolean |
| addUserToEvent(String, String) | boolean |
| removeUserFromEvent(String, String) | boolean |
| getUsersForEvent(String) | ArrayList<String> |
| getEventsForAttendee(String) | ArrayList<String> |
| getEventsBySpeaker(String) | ArrayList<String> |
| stringEvents | ArrayList<String> |
| displayStringEvents | ArrayList<String> |
| listOfAttendeesId | ArrayList<String> |
| listOfSpeakersId | ArrayList<String> |

**EventServiceEngine**

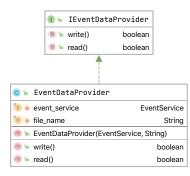| | |
|---|---|
| event_list | ArrayList<Event> |
| attendee_capacity | int |
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, String) | boolean |
| addUserToEvent(String, String) | boolean |
| removeUserFromEvent(String, String) | boolean |
| getUsersForEvent(String) | ArrayList<String> |
| getEventsForAttendee(String) | ArrayList<String> |
| getEventsBySpeaker(String) | ArrayList<String> |
| verifyEvent(Event) | boolean |
| isTimeConflict(LocalDateTime[], LocalDateTime[]) | boolean |
| signUpAuthorization(Event, String) | boolean |
| stringEvents | ArrayList<String> |
| displayStringEvents | ArrayList<String> |
| listOfAttendeesId | ArrayList<String> |
| listOfSpeakersId | ArrayList<String> |

**IEventController** «interface»

| | |
|---|---|
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, String) | boolean |
| saveEvents() | boolean |
| readEvents() | boolean |
| getEventsForUser(String) | ArrayList<String> |
| signUp(String, String) | boolean |
| cancelSignUp(String, String) | boolean |
| eventService | EventService |
| stringEvents | ArrayList<String> |
| displayStringEvents | ArrayList<String> |

**EventController**

| | |
|---|---|
| data_provider | IEventDataProvider |
| user_service | UserService |
| EventController(String, UserService) | |
| getEventsForUser(String) | ArrayList<String> |
| addEvent(String, LocalDateTime, LocalDateTime, String, ArrayList<String>) | boolean |
| addEvent(String, LocalDateTime, LocalDateTime, String, String) | boolean |
| signUp(String, String) | boolean |
| cancelSignUp(String, String) | boolean |
| saveEvents() | boolean |
| readEvents() | boolean |
| eventService | EventService |
| stringEvents | ArrayList<String> |
| displayStringEvents | ArrayList<String> |

**EventPresenter**

| | |
|---|---|
| scheduleMainMenu() | ArrayList<String> |
| signupMainMenu() | ArrayList<String> |
| signupPrompt() | String |
| promptUser() | String |
| invalidSelection() | String |
| invalidInput() | String |
| invalidTimeInput() | String |
| enterEventID() | String |
| enterStartTime() | String |
| enterEndTime() | String |
| enterRoomID() | String |
| enterSpeakerID() | String |
| failToRead() | String |
| signUpSuccess(String) | String |
| eventAddFail(String, String, String) | String |
| signUpFail(String) | String |
| bookingSuccess(String) | String |
| showScheduledEvents(String) | String |
| cancelSuccess(String) | String |
| cancelFail(String) | String |
| eventToRemove | String |

**Event**

| | |
|---|---|
| formatter | DateTimeFormatter |
| Event(String, LocalDateTime, LocalDateTime, String, ArrayList<String>) | |
| Event(String, LocalDateTime, LocalDateTime, String, ArrayList<String>, ArrayList<String>) | |
| toString() | String |
| listToString(ArrayList<String>) | String |
| eventID | String |
| endTime | LocalDateTime |
| roomID | String |
| speakerIDs | ArrayList<String> |
| startTime | LocalDateTime |
| attendeeIDs | ArrayList<String> |

**IEventDataProvider** «interface»

| | |
|---|---|
| write() | boolean |
| read() | boolean |

**EventDataProvider**

| | |
|---|---|
| event_service | EventService |
| file_name | String |
| EventDataProvider(EventService, String) | |
| write() | boolean |
| read() | boolean |

**EventSchedulingSystem**

| | |
|---|---|
| run(EventPresenter, IEventController, Scanner) | boolean |
| isValidParam(String) | boolean |
| isValidDate(String, DateTimeFormatter) | boolean |
| abort(Scanner) | boolean |

**EventSignUpSystem**

| | |
|---|---|
| run(String, EventPresenter, IEventController, Scanner) | boolean |