

ГУАП

КАФЕДРА № 42

ОТЧЕТ  
ЗАЩИЩЕН С ОЦЕНКОЙ \_\_\_\_\_

ПРЕПОДАВАТЕЛЬ

доцент, кандидат тех. наук				Бржезовский А. В.
должность, уч. степень, звание		подпись, дата		инициалы, фамилия

ОТЧЕТ О ЛАБОРАТОРНОЙ РАБОТЕ №4

**ПРОГРАММИРОВАНИЕ ИНТЕРФЕЙСА**

Вариант 5

по курсу: МЕТОДЫ И СРЕДСТВА ПРОЕКТИРОВАНИЯ  
ИНФОРМАЦИОННЫХ СИСТЕМ И ТЕХНОЛОГИЙ

РАБОТУ ВЫПОЛНИЛ

СТУДЕНТ ГР. №	4128			Воробьев В.А.
			подпись, дата	инициалы, фамилия

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## **1 Цель работы**

Изучить методы программирования интерфейсов пользователей.

### **1.1 Задание**

Для выбранного варианта задания спроектировать слой доступа к данным информационной системы с использованием шаблонов проектирования. Слой доступа к данным должен обеспечивать, выборку, вставку, модификацию и удаление записей в таблицах базы данных.

## 2 Выполнение работы

В итоговом Flutter проекте интерфейс интегрирован с базой данных, обеспечивая взаимодействие клиентской и серверной Ktor частей. Мы изолировали бизнес-логику от базы данных с помощью преобразователя данных для улучшения архитектуры и масштабируемости. Использовали следующие подходы:

1. Единица работы: сохранение всех изменений профиля пользователя в одной транзакции.
2. Внешние ключи: каждая конференция связана с определённым организатором через `organizer_id`.
3. Таблицы ассоциаций: таблица `conference_topic` сопоставляет многие конференции с множеством тем.
4. Сценарии транзакций: сценарий для регистрации пользователя на конференцию, включающий проверку доступных мест.
5. Шлюзы таблицы данных: `ConferenceService` управляет операциями чтения и записи в таблицу конференций.
6. Преобразователи данных: преобразование данных пользователя из базы данных в объект `User`.

### 2.1 Описание работы интерфейса

На этом экране пользователь видит форму для входа в систему. Она содержит поля для ввода имени пользователя и пароля, а также кнопку для подтверждения входа. Этот интерфейс обеспечивает безопасную авторизацию, после которой пользователи получают доступ к функциональности приложения, включая просмотр и управление конференциями.

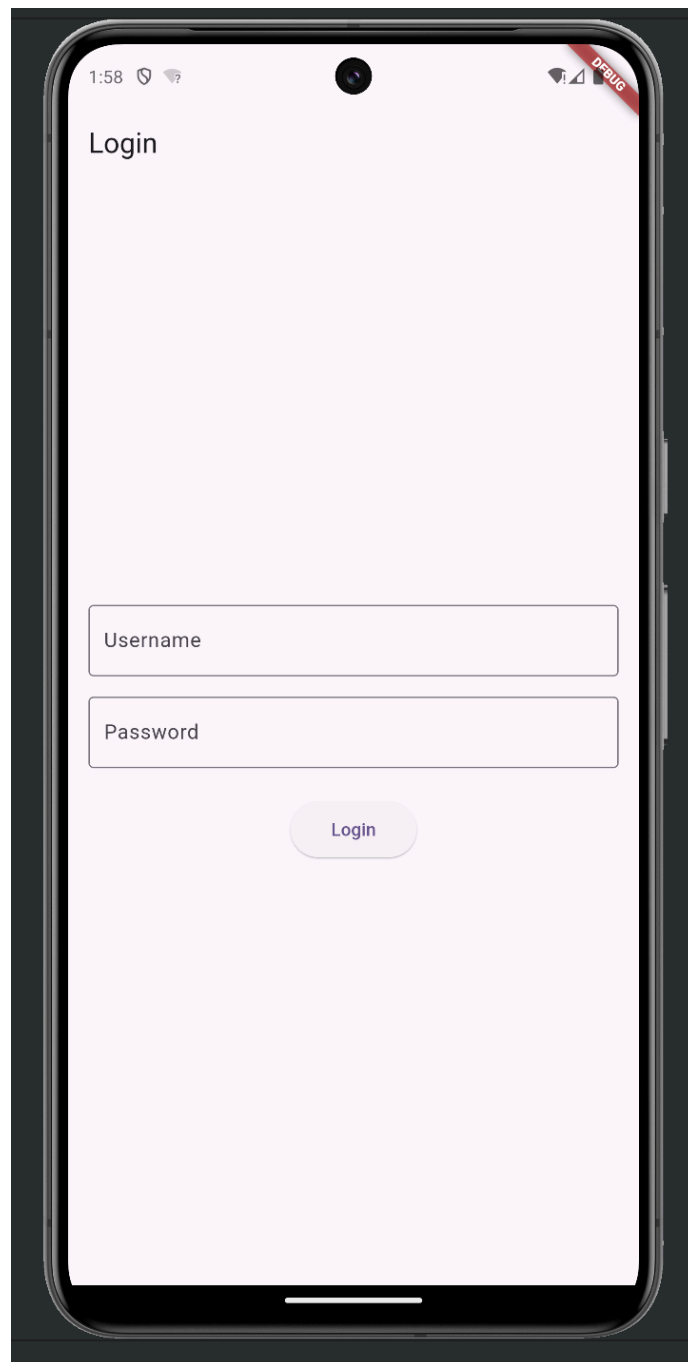


Рисунок 2.1 - Форма логина

Этот экран представляет собой основной список всех доступных конференций, доступных для пользователя. Здесь можно увидеть основную информацию по каждой конференции, включая название, дату и тему. Экран также предоставляет возможность быстрого доступа к детальной информации о каждой конференции посредством простого нажатия на соответствующую строку в списке.

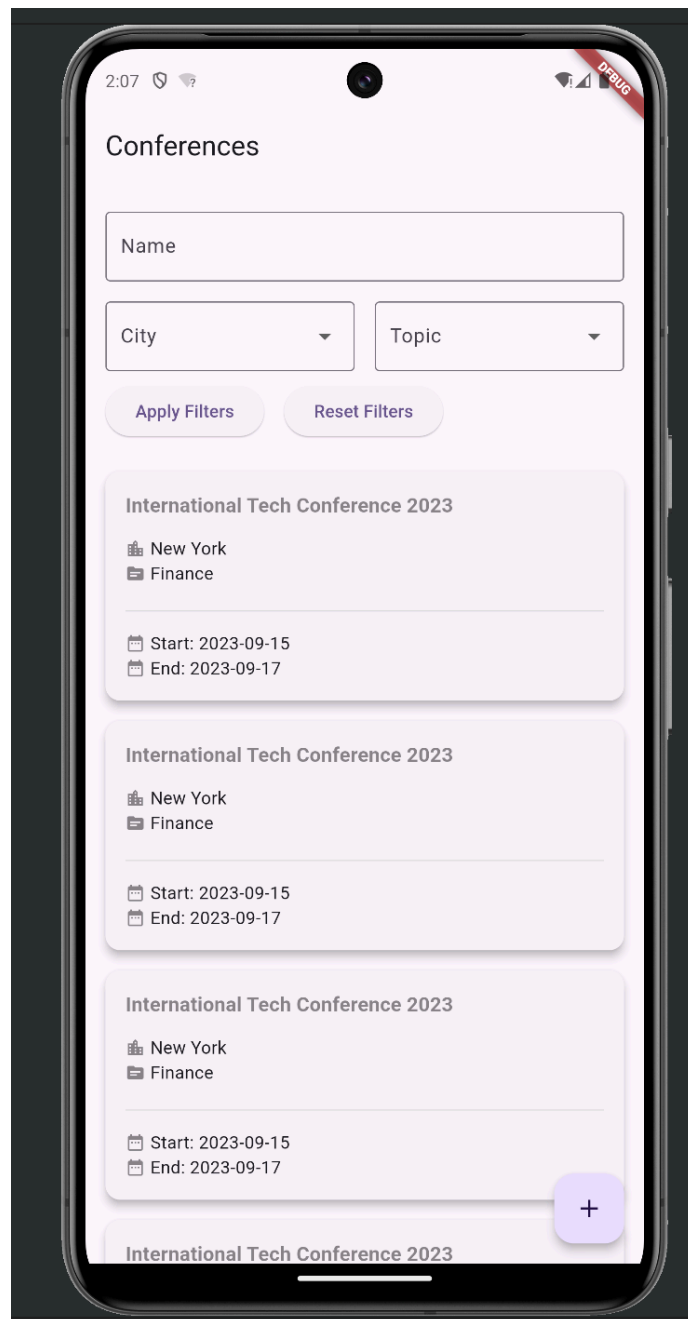


Рисунок 2.2 - Список конференций

На данном экране пользователи видят полную информацию о выбранной конференции. Блоки данных содержат детали, такие как даты проведения, местоположение, описание и контакты организаторов. Интерфейс также предлагает операции редактирования и удаления конференции, если они разрешены для текущего пользователя.

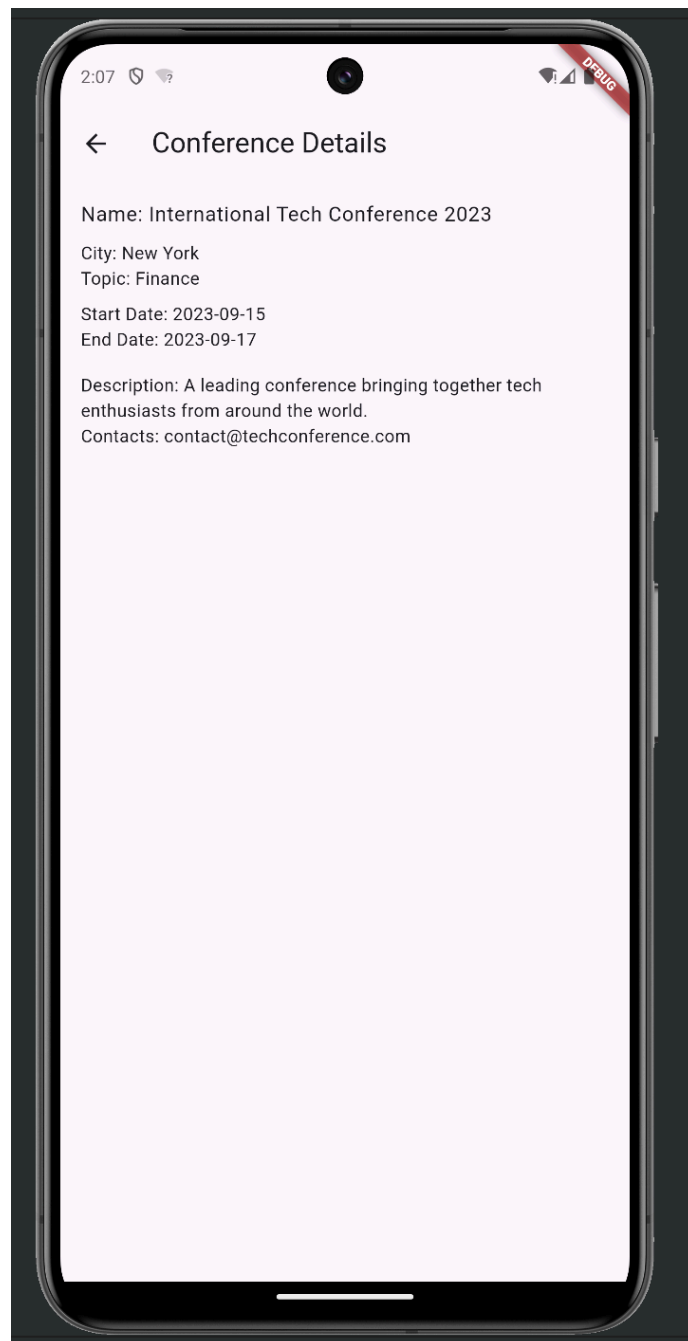


Рисунок 2.3 - Информация о конференции

Этот экран демонстрирует окно настройки фильтрации списка конференций. Пользователь может выбрать параметры фильтрации, такие как даты, тема или город, чтобы сузить отображаемый список конференций. Этот функционал помогает пользователям быстро находить и получать доступ к наиболее релевантным для них конференциям.

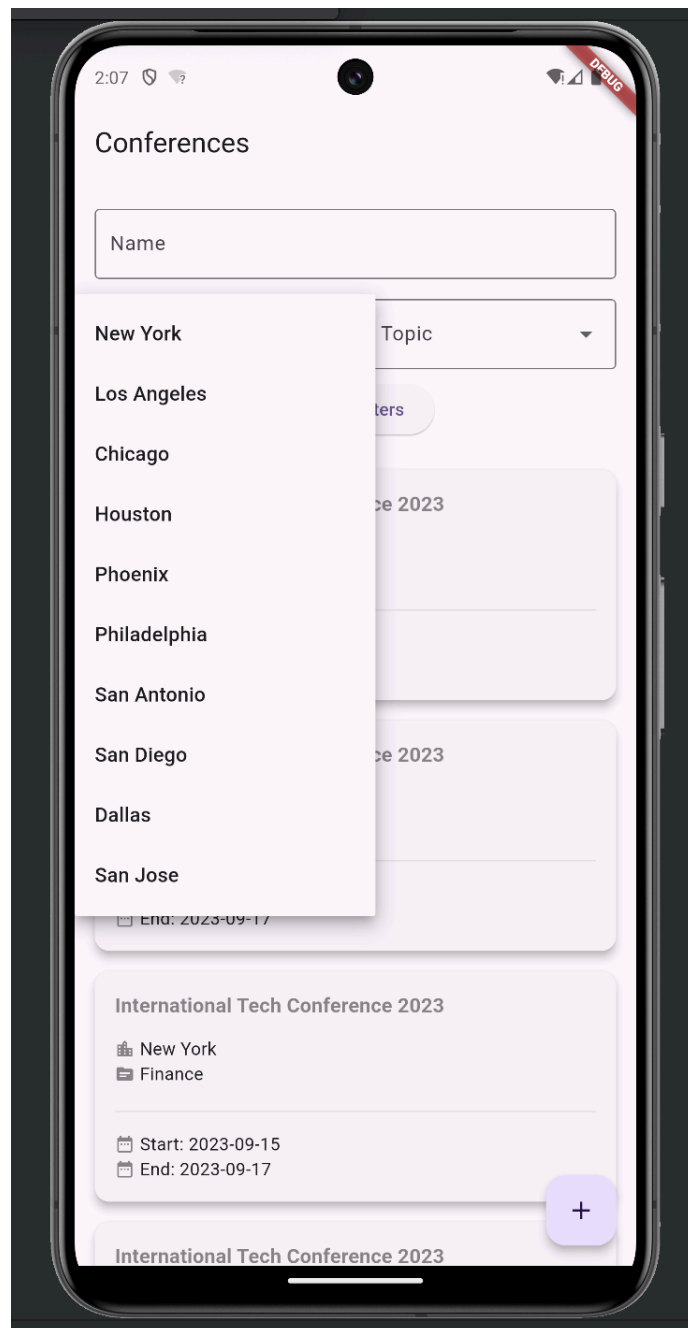


Рисунок 2.4 - Настройка фильтрации

После настройки фильтров пользователь возвращается на основной экран со списком конференций, где теперь отображаются только те конференции, которые соответствуют установленным критериям. Это подчеркивает удобство использования и персонализацию отображаемого контента.



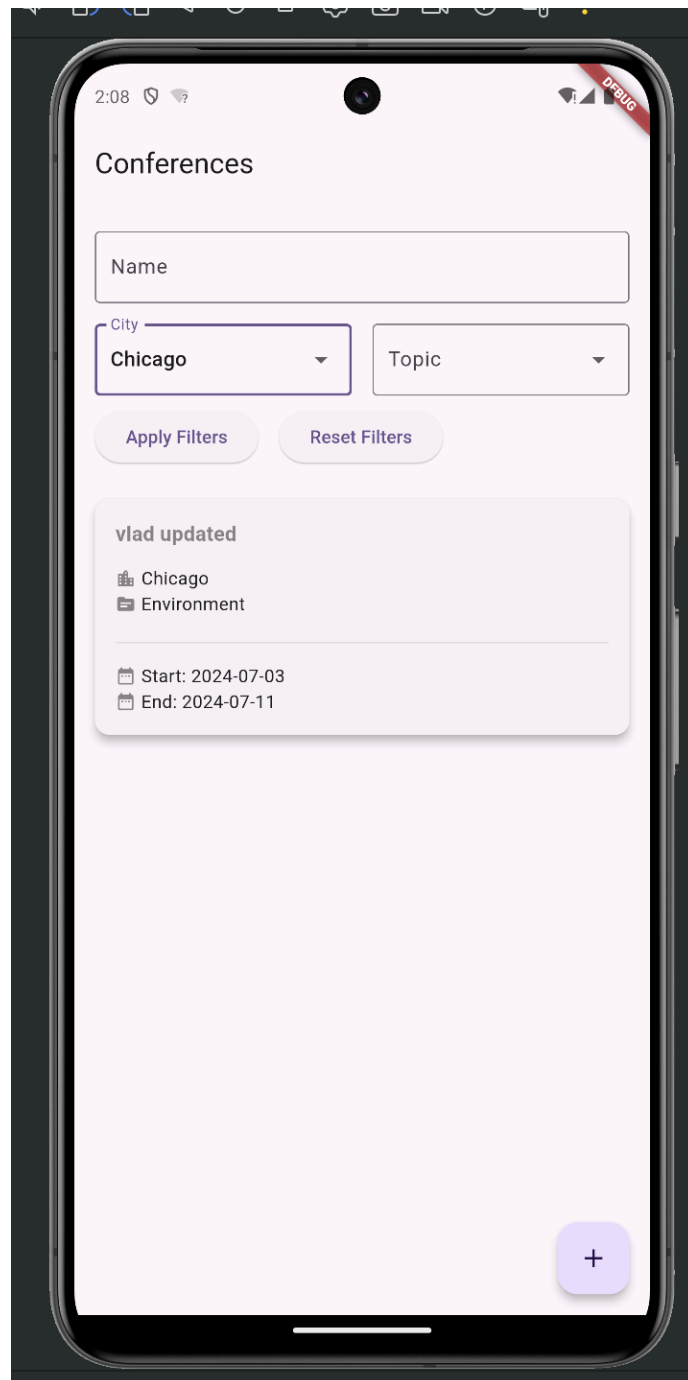


Рисунок 2.5 - Применение фильтрации

Этот скриншот показывает диалоговое окно, появляющееся в ситуации, когда происходят ошибки, например, при авторизации или подключении к базе данных. Диалог содержит сообщение об ошибке и инструкции по устранению проблемы, а также кнопку для закрытия окна. Такое окно позволяет пользователям быть в курсе возможных проблем и предпринимать соответствующие действия для их решения.

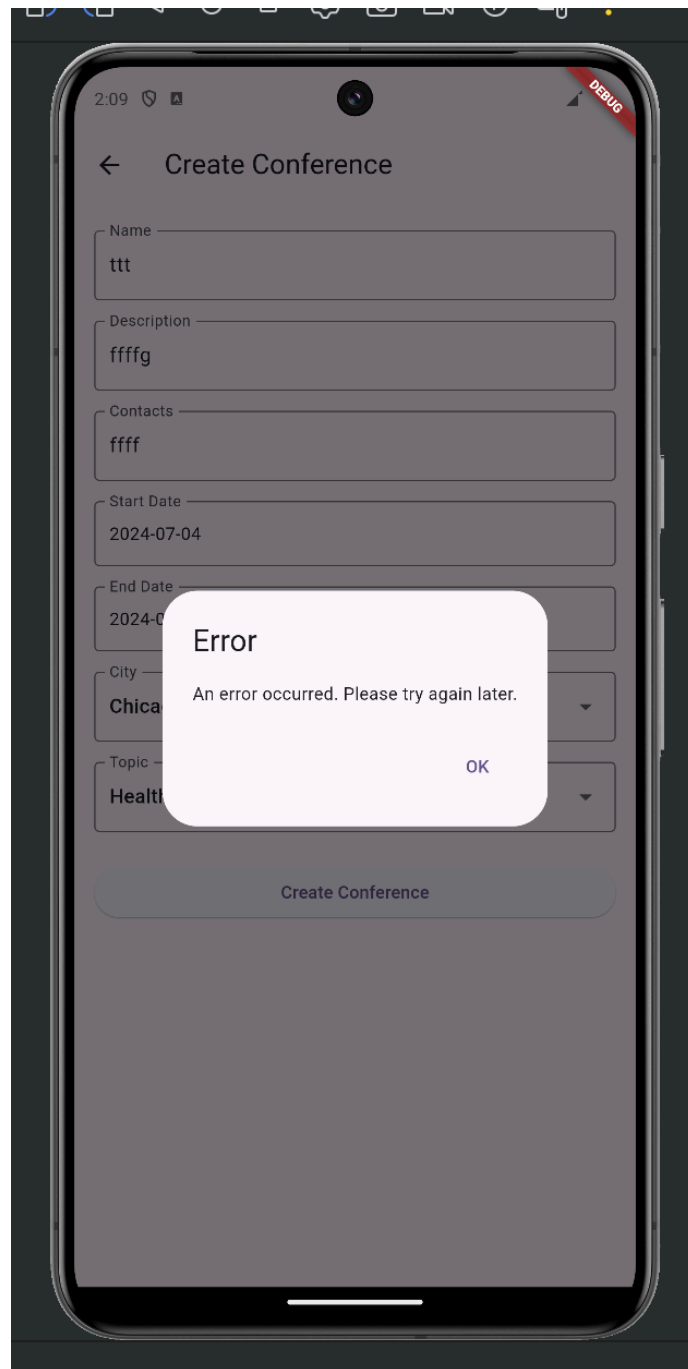


Рисунок 2.6 - Диалог об ошибке

### **3 Вывод**

В ходе выполнения лабораторной работы был разработан внешний интерфейс пользователя в статическом прототипировании с использованием Flutter и Ktor. Полученная программа полностью работоспособна и взаимодействует с базой данной в рамках используемых шаблонов.

## ПРИЛОЖЕНИЕ

```
1 Application.kt
2 package suai.vladcto
3
4 import io.ktor.serialization.kotlinx.json.json
5 import io.ktor.server.application.Application
6 import io.ktor.server.application.install
7 import io.ktor.server.engine.embeddedServer
8 import io.ktor.server.netty.Netty
9 import io.ktor.server.plugins.contentnegotiation.
    ContentNegotiation
10 import kotlinx.serialization.json.Json
11 import suai.vladcto.routing.configureRouting
12
13 fun main(args: Array<String>) {
14     embeddedServer(
15         Netty,
16         port = 8080,
17         host = "127.0.0.1",
18         module = Application::module
19     ).start(wait = true)
20 }
21
22 fun Application.module() {
23     install(ContentNegotiation) {
24         json(
25             Json {
26                 ignoreUnknownKeys = true
27                 isLenient = true
28                 prettyPrint = true
29             }
30         )
31     }
32     configureRouting()
33 }
34
35 DatabaseFactory.kt
36 package suai.vladcto.db
37
38 import java.sql.Connection
39 import java.sql.DriverManager
```

```

40
41 object DatabaseFactory {
42     private var connection: Connection? = null
43
44     private fun connect() {
45         connection = DriverManager.getConnection(
46             "jdbc:mysql://localhost:3306/conference",
47             "root",
48             ""
49         )
50     }
51
52     fun getConnection(): Connection {
53         val connection = this.connection
54         if (connection == null || connection.isClosed) {
55             connect()
56         }
57         return this.connection!!
58     }
59 }
60 Routing.kt
61 package suai.vladcto.routing
62
63 import io.ktor.http.HttpStatusCode
64 import io.ktor.server.application.Application
65 import io.ktor.server.request.receive
66 import io.ktor.server.response.respond
67 import io.ktor.server.routing.get
68 import io.ktor.server.routing.post
69 import io.ktor.server.routing.routing
70 import suai.vladcto.services.auth.AuthService
71 import suai.vladcto.services.city.CityService
72 import suai.vladcto.services.conference.ConferenceRequest
73 import suai.vladcto.services.conference.ConferenceService
74 import suai.vladcto.services.conference.
75     ConferenceUpdateRequest
76 import suai.vladcto.services.topic.TopicService
77
78 fun Application.configureRouting() {
79     val authService = AuthService()
80     val topicService = TopicService()

```

```

80     val cityService = CityService()
81     val conferenceService = ConferenceService(
82         topicService,
83         cityService,
84     )
85
86     routing {
87         post("/authorize") {
88             val params = call.request.queryParameters
89             val username = params["name"]
90             val password = params["password"]
91             if (username.isNullOrBlank() || password.
92                 isNullOrBlank()) {
93                 call.respond(HttpStatusCode.BadRequest, "
94                     Invalid user data")
95                 return@post
96             }
97
98             val result = authService.registerUser(username,
99                 password)
100
101             result
102                 .onSuccess { token ->
103                     call.respond(HttpStatusCode.Created,
104                         mapOf("token" to token))
105                 }
106                 .onFailure { error ->
107                     call.respond(HttpStatusCode.Conflict,
108                         error.message ?: "Registration failed
109                             ")
110                 }
111
112             }
113
114         get("/conferences_search_options") {
115             val searchOptions = conferenceService.
116                 getSearchOptions()
117             call.respond(HttpStatusCode.OK, searchOptions)
118         }
119
120         get("/conferences_list") {
121             val name = call.request.queryParameters["name"]

```

```

114         val cityId = call.request.queryParameters["cityId"]?.toIntOrNull()
115         val topicId = call.request.queryParameters["topicId"]?.toIntOrNull()
116         val startDate = call.request.queryParameters["startDate"]
117         val endDate = call.request.queryParameters["endDate"]
118         val description = call.request.queryParameters["description"]
119         val contacts = call.request.queryParameters["contacts"]
120         val imageUrl = call.request.queryParameters["imageUrl"]
121
122         val filterRequest = ConferenceRequest(
123             name = name ?: "",
124             cityId = cityId ?: 0,
125             topicId = topicId ?: 0,
126             startDate = startDate ?: "",
127             endDate = endDate ?: "",
128             description = description ?: "",
129             contacts = contacts ?: "",
130             imageUrl = imageUrl ?: ""
131         )
132
133         val conferences = conferenceService.
            getConferences(filterRequest)
134
135         call.respond(HttpStatusCode.OK, conferences)
136     }
137
138     postAuthorized(authService, "/create_conference") {
139         username ->
140         val conferenceRequest = call.receive<
141             ConferenceRequest>()
142
143         if (conferenceRequest.name.isBlank() ||
144             conferenceRequest.cityId <= 0 ||
145             conferenceRequest.topicId <= 0 ||

```

```

142         conferenceRequest.startDate.isBlank() ||
            conferenceRequest.endDate.isBlank()
143     ) {
144         call.respond(HttpStatusCode.BadRequest, "
            Missing or invalid conference data")
145         return@postAuthorized
146     }
147
148     val result = conferenceService.createConference(
149         name = conferenceRequest.name,
150         cityId = conferenceRequest.cityId,
151         topicId = conferenceRequest.topicId,
152         authorUsername = username,
153         startDate = conferenceRequest.startDate,
154         endDate = conferenceRequest.endDate,
155         description = conferenceRequest.description,
156         contacts = conferenceRequest.contacts,
157         imageUrl = conferenceRequest.imageUrl,
158     )
159
160     result.onSuccess {
161         call.respond(
162             HttpStatusCode.Created,
163             "Conference created successfully with ID:
                $it"
164         )
165     }.onFailure { error ->
166         call.respond(
167             HttpStatusCode.Conflict,
168             error.message ?: "Error creating
                conference"
169         )
170     }
171 }
172
173 getAuthorized(authService, "/conference/{id}") {
    username ->
174     val conferenceId = call.parameters["id"]?.
        toIntOrNull()
175     if (conferenceId == null) {

```



```

176         call.respond(HttpStatusCode.BadRequest, "
           Invalid conference ID")
177         return@getAuthorized
178     }
179
180     val result = conferenceService.
       getConferenceDetails(conferenceId, username)
181
182     result.onSuccess { conferenceDetails ->
183         call.respond(HttpStatusCode.OK,
           conferenceDetails)
184     }.onFailure { error ->
185         call.respond(
186             HttpStatusCode.NotFound,
187             error.message ?: "Conference not found"
188         )
189     }
190 }
191
192 putAuthorized(authService, "/conference/{id}") {
   username ->
193     val conferenceId = call.parameters["id"]?.
       toIntOrNull()
194     if (conferenceId == null) {
195         call.respond(HttpStatusCode.BadRequest, "
           Invalid conference ID")
196         return@putAuthorized
197     }
198
199     val updateRequest = call.receive<
       ConferenceUpdateRequest>()
200
201     val result = conferenceService.updateConference(
202         conferenceId = conferenceId,
203         username = username,
204         name = updateRequest.name,
205         cityId = updateRequest.cityId,
206         topicId = updateRequest.topicId,
207         startDate = updateRequest.startDate,
208         endDate = updateRequest.endDate,
209         description = updateRequest.description,

```

```

210         contacts = updateRequest.contacts ,
211         imageUrl = updateRequest.imageUrl ,
212     )
213
214     result.onSuccess {
215         call.respond(HttpStatusCode.OK, "Conference
216             updated successfully")
217     }.onFailure { error ->
218         call.respond(
219             HttpStatusCode.Conflict ,
220             error.message ?: "Error updating
221                 conference"
222         )
223     }
224
225     postAuthorized(authService , "/delete_conference/{id
226         username ->
227         val conferenceId = call.parameters["id"]?.
228             toIntOrNull()
229         if (conferenceId == null) {
230             call.respond(HttpStatusCode.BadRequest , "
231                 Invalid conference ID")
232             return@postAuthorized
233         }
234
235         val result = conferenceService.deleteConference(
236             conferenceId , username)
237
238         result.onSuccess {
239             call.respond(HttpStatusCode.OK, "Conference
240                 deleted successfully")
241         }.onFailure { error ->
242             call.respond(
243                 HttpStatusCode.Conflict ,
244                 error.message ?: "Error deleting
245                     conference"
246             )
247         }
248     }
249 }

```

```

243 }
244
245 AuthorizedRouting.kt
246 package suai.vladcto.routing
247
248 import io.ktor.http.HttpStatusCode
249 import io.ktor.server.application.ApplicationCall
250 import io.ktor.server.response.respond
251 import io.ktor.server.routing.Route
252 import io.ktor.server.routing.RoutingContext
253 import io.ktor.server.routing.get
254 import io.ktor.server.routing.post
255 import io.ktor.server.routing.put
256 import suai.vladcto.services.auth.AuthService
257
258 private suspend fun authorizeAndHandle(
259     call: ApplicationCall, authService: AuthService, handler:
260         suspend (String) -> Unit
261 ) {
262     val username = authService.verifyToken(call.request.
263         headers["Authorization"])
264     if (username == null) {
265         call.respond(HttpStatusCode.Unauthorized, "Invalid
266             token")
267     } else {
268         handler(username)
269     }
270 }
271
272 fun Route.getAuthorized(
273     authService: AuthService,
274     path: String,
275     handler: suspend RoutingContext.(String) -> Unit
276 ) {
277     get(path) {
278         authorizeAndHandle(call, authService) { username ->
279             handler(username)
280         }
281     }
282 }

```

```

281
282 fun Route.postAuthorized(
283     authService: AuthService,
284     path: String,
285     handler: suspend RoutingContext.(String) -> Unit
286 ) {
287     post(path) {
288         authorizeAndHandle(call, authService) { username ->
289             handler(username)
290         }
291     }
292 }
293
294 fun Route.putAuthorized(
295     authService: AuthService,
296     path: String,
297     handler: suspend RoutingContext.(String) -> Unit
298 ) {
299     put(path) {
300         authorizeAndHandle(call, authService) { username ->
301             handler(username)
302         }
303     }
304 }
305
306 CityService.kt
307 package suai.vladcto.services.city
308
309 import suai.vladcto.db.DatabaseFactory
310 import java.sql.SQLException
311
312 class CityService {
313
314     fun getCityNameById(cityId: Int): String? {
315         val query = "SELECT name FROM Cities WHERE id = ?"
316
317         return try {
318             val connection = DatabaseFactory.getConnection()
319
320             connection.prepareStatement(query).use {
321                 preparedStatement ->

```

```

321         preparedStatement.setInt(1, cityId)
322         val resultSet = preparedStatement.
            executeQuery()
323
324         if (resultSet.next()) {
325             resultSet.getString("name")
326         } else {
327             null
328         }
329     }
330 } catch (e: SQLException) {
331     null
332 }
333 }
334
335 fun getAllCities(): List<City> {
336     try {
337         val query = "SELECT id, name FROM Cities"
338         val cities = mutableListOf<City>()
339         val connection = DatabaseFactory.getConnection()
340
341         connection.createStatement().use { statement ->
342             val resultSet = statement.executeQuery(query)
343
344             while (resultSet.next()) {
345                 val id = resultSet.getInt("id")
346                 val name = resultSet.getString("name")
347                 cities.add(City(id, name))
348             }
349         }
350         return cities
351     } catch (e: SQLException) {
352         return listOf()
353     }
354 }
355 }
356
357 City.kt
358 package suai.vladcto.services.city
359
360 import kotlinx.serialization.Serializable

```

```

361
362 @Serializable
363 data class City(val id: Int, val name: String)
364 ConferenceUpdateRequest.kt
365 package suai.vladcto.services.conference
366
367 import kotlinx.serialization.Serializable
368
369
370 @Serializable
371 data class ConferenceUpdateRequest(
372     val name: String?,
373     val cityId: Int?,
374     val topicId: Int?,
375     val startDate: String?,
376     val endDate: String?,
377     val description: String?,
378     val contacts: String?,
379     val imageUrl: String?,
380 )
381
382 ConferenceResponse.kt
383 package suai.vladcto.services.conference
384
385 import kotlinx.serialization.Serializable
386
387 @Serializable
388 data class ConferenceShortResponse (
389     val id: Int,
390     val name: String,
391     val city: String,
392     val topic: String,
393     val startDate: String,
394     val endDate: String,
395 )
396
397 @Serializable
398 data class ConferenceDetailResponse (
399     val id: Int,
400     val name: String,
401     val city: String,

```

```

402     val topic: String ,
403     val startDate: String ,
404     val endDate: String ,
405     val description: String ,
406     val contacts: String ,
407     val canRedact: Boolean ,
408 )
409 ConferenceService.kt
410 package suai.vladcto.services.conference
411
412 import suai.vladcto.db.DatabaseFactory
413 import suai.vladcto.services.city.CityService
414 import suai.vladcto.services.topic.TopicService
415 import java.sql.ResultSet
416 import java.sql.SQLException
417
418 class ConferenceService(
419     private val topicService: TopicService ,
420     private val cityService: CityService ,
421 ) {
422     fun createConference(
423         name: String ,
424         cityId: Int ,
425         topicId: Int ,
426         authorUsername: String ,
427         startDate: String ,
428         endDate: String ,
429         description: String = "",
430         contacts: String = "",
431         imageUrl: String = ""
432     ): Result<Int> {
433         return try {
434             val connection = DatabaseFactory.getConnection()
435             val sql = """
436                 INSERT INTO Conferences (
437                     name, city_id , topic_id , author_username ,
438                     start_date , end_date , description ,
439                     contacts , image_url
440
441                 ) VALUES (
442                     '$name' , $cityId , $topicId , '
443                     $authorUsername ' , '$startDate ' , '

```

```

                                $endDate ', '$description ', '$contacts
                                ', '$imageUrl '
440                                )
441                                """
442
443                                connection.createStatement().use { statement ->
444                                    statement.executeUpdate(sql, java.sql.
                                        Statement.RETURN_GENERATED_KEYS)
445
446                                    val generatedKeys = statement.generatedKeys
447                                    if (generatedKeys.next()) {
448                                        Result.success(generatedKeys.getInt(1))
449                                    } else {
450                                        Result.failure(SQLException("Failed to
                                            retrieve conference ID"))
451                                    }
452                                }
453                                } catch (e: SQLException) {
454                                    Result.failure(e)
455                                }
456                            }
457
458
459                            fun getConferences(filter: ConferenceRequest): List<
                                ConferenceShortResponse> {
460                                val queryBuilder = StringBuilder("SELECT * FROM
                                    Conferences WHERE 1=1")
461
462                                if (filter.name.isNotEmpty()) {
463                                    queryBuilder.append(" AND name ILIKE '%${filter.
                                        name}% '")
464                                }
465                                if (filter.cityId != 0) {
466                                    queryBuilder.append(" AND city_id = ${filter.
                                        cityId}")
467                                }
468                                if (filter.topicId != 0) {
469                                    queryBuilder.append(" AND topic_id = ${filter.
                                        topicId}")
470                                }
471                                if (filter.startDate.isNotEmpty()) {

```



```

472         queryBuilder.append(" AND start_date >= '${filter
           .startDate} ")
473     }
474     if ( filter.endDate.isNotEmpty() ) {
475         queryBuilder.append(" AND end_date <= '${filter.
           endDate} ")
476     }
477
478     return try {
479         val connection = DatabaseFactory.getConnection()
480
481         connection.createStatement().use { statement ->
482             val resultSet = statement.executeQuery(
483                 queryBuilder.toString() )
484             val conferences = mutableListOf<
485                 ConferenceShortResponse>()
486
487             while (resultSet.next()) {
488                 conferences.add(mapRowToConference(
489                     resultSet))
490             }
491             conferences
492         } catch (e: SQLException) {
493             emptyList()
494         }
495     }
496
497     fun getSearchOptions(): ConferenceSearchOptions {
498         val cities = cityService.getAllCities()
499         val topics = topicService.getAllTopics()
500
501         return ConferenceSearchOptions(
502             cities = cities ,
503             topics = topics ,
504         )
505     }
506
507     fun updateConference(
508         conferenceId: Int ,

```

```

508         username: String ,
509         name: String? = null ,
510         cityId: Int? = null ,
511         topicId: Int? = null ,
512         startDate: String? = null ,
513         endDate: String? = null ,
514         description: String? = null ,
515         contacts: String? = null ,
516         imageUrl: String? = null
517     ): Result<Boolean> {
518         return try {
519             if (!isUserAuthorOfConference(conferenceId ,
520                 username)) {
521                 return Result.failure( SecurityException("User
522                     $username is not the author of the
523                     conference.") )
524             }
525
526             val connection = DatabaseFactory.getConnection()
527             val updateQuery = StringBuilder("UPDATE
528                 Conferences SET ")
529
530             val updates = mutableListOf<String>()
531             name?.let { updates.add("name = '$it'") }
532             cityId?.let { updates.add("city_id = $it") }
533             topicId?.let { updates.add("topic_id = $it") }
534             startDate?.let { updates.add("start_date = '$it
535                 '") }
536             endDate?.let { updates.add("end_date = '$it'") }
537             description?.let { updates.add("description = '
538                 $it'") }
539             contacts?.let { updates.add("contacts = '$it'") }
540             imageUrl?.let { updates.add("image_url = '$it'")
541                 }
542
543             if (updates.isEmpty()) {
544                 return Result.failure(
545                     IllegalArgumentException("No fields to
546                     update"))
547             }
548         }
549     }

```

```

540         updateQuery.append(updates.joinToString(", "))
541         updateQuery.append(" WHERE id = $conferenceId")
542
543         // Debug: print the SQL query
544         println("Executing SQL: $updateQuery")
545
546         connection.createStatement().use { statement ->
547             val rowsAffected = statement.executeUpdate(
548                 updateQuery.toString()
549             ) if (rowsAffected > 0) {
550                 Result.success(true)
551             } else {
552                 Result.failure(SQLException("No
553                     conference found with id:
554                     $conferenceId"))
555             }
556         }
557     }
558
559     fun deleteConference(conferenceId: Int, username: String)
560       : Result<Boolean> {
561         return try {
562             if (!isUserAuthorOfConference(conferenceId,
563                 username)) {
564                 return Result.failure(SQLException("User is
565                     not the author of the conference"))
566             }
567
568             val connection = DatabaseFactory.getConnection()
569             val sql = "DELETE FROM Conferences WHERE id = ?"
570
571             connection.prepareStatement(sql).use {
572                 preparedStatement ->
573                     preparedStatement.setInt(1, conferenceId)
574                 val rowsAffected = preparedStatement.
575                     executeUpdate()
576
577                 if (rowsAffected > 0) {

```

```

573         Result.success(true)
574     } else {
575         Result.failure(SQLException("Could not
            delete conference with id:
            $conferenceId"))
576     }
577 }
578 } catch (e: SQLException) {
579     Result.failure(e)
580 }
581 }
582
583
584 fun getConferenceDetails(
585     conferenceId: Int, username: String
586 ): Result<ConferenceDetailResponse> {
587     return try {
588         val connection = DatabaseFactory.getConnection()
589
590         val sql = "SELECT * FROM Conferences WHERE id =
            ?"
591
592         connection.prepareStatement(sql).use {
            preparedStatement ->
593             preparedStatement.setInt(1, conferenceId)
594
595             val resultSet = preparedStatement.
                executeQuery()
596             if (resultSet.next()) {
597                 val conferenceDetail =
                    ConferenceDetailResponse(
598                     id = resultSet.getInt("id"),
599                     name = resultSet.getString("name"),
600                     city = cityService.getCityNameById(
                        resultSet.getInt("city_id")) ?:
                        "",
601                     topic = topicService.getTopicNameById(
                        resultSet.getInt("topic_id")) ?:
                        "",
602                     startDate = resultSet.getString("
                        start_date"),

```

```

603         endDate = resultSet.getString("
        end_date"),
604         description = resultSet.getString("
        description"),
605         contacts = resultSet.getString("
        contacts"),
606         canRedact = isUserAuthorOfConference(
        conferenceId, username)
607     )
608     Result.success(conferenceDetail)
609 } else {
610     Result.failure(SQLException("No
        conference found with id:
        $conferenceId"))
611 }
612 }
613 } catch (e: SQLException) {
614     Result.failure(e)
615 }
616 }
617
618 private fun isUserAuthorOfConference(conferenceId: Int,
        username: String): Boolean {
619     return try {
620         val connection = DatabaseFactory.getConnection()
621         val sql = "SELECT author_username FROM
        Conferences WHERE id = ?"
622
623         connection.prepareStatement(sql).use {
        preparedStatement ->
624             preparedStatement.setInt(1, conferenceId)
625
626             val resultSet = preparedStatement.
        executeQuery()
627             if (resultSet.next()) {
628                 val authorUsername = resultSet.getString
        ("author_username")
629                 authorUsername == username
630             } else {
631                 false
632             }

```

```

633         }
634     } catch (e: SQLException) {
635         false
636     }
637 }
638
639 private fun mapRowToConference(rs: ResultSet):
    ConferenceShortResponse {
640     return ConferenceShortResponse(
641         id = rs.getInt("id"),
642         name = rs.getString("name"),
643         city = cityService.getCityNameById(rs.getInt("
            city_id")) ?: "",
644         topic = topicService.getTopicNameById(rs.getInt("
            topic_id")) ?: "",
645         startDate = rs.getString("start_date"),
646         endDate = rs.getString("end_date"),
647     )
648 }
649 }
650
651 ConferenceRequest.kt
652 package suai.vladcto.services.conference
653
654 import kotlinx.serialization.Serializable
655
656 @Serializable
657 data class ConferenceRequest(
658     val name: String,
659     val cityId: Int,
660     val topicId: Int,
661     val startDate: String,
662     val endDate: String,
663     val description: String,
664     val contacts: String,
665     val imageUrl: String,
666 )
667
668 ConferencSearchOptions.kt
669 package suai.vladcto.services.conference
670

```

```

671 import kotlinx.serialization.Serializable
672 import suai.vladcto.services.city.City
673 import suai.vladcto.services.topic.Topic
674
675 @Serializable
676 data class ConferenceSearchOptions(
677     val cities: List<City>,
678     val topics: List<Topic>
679 )
680 AuthService.kt
681 package suai.vladcto.services.auth
682
683 import suai.vladcto.db.DatabaseFactory
684 import java.security.MessageDigest
685 import java.sql.Connection
686 import java.util.UUID
687
688 class AuthService {
689
690     fun registerUser(username: String, password: String):
        Result<String> {
691         val connection = DatabaseFactory.getConnection()
692
693         val existingToken = getTokenIfUserExist(connection,
            username)
694         if (existingToken != null) {
695             return Result.success(existingToken)
696         }
697
698         val passwordHash = hashPassword(password)
699         val token = generateToken()
700         insertUser(connection, username, passwordHash, token)
701
702         return Result.success(token)
703     }
704
705     fun verifyToken(token: String?): String? {
706         if (token == null) return null
707
708         val connection = DatabaseFactory.getConnection()

```

```

709         val query = "SELECT username FROM Users WHERE token =
                        ?"
710         connection.prepareStatement(query).use {
            preparedStatement ->
711             preparedStatement.setString(1, token)
712             val resultSet = preparedStatement.executeQuery()
713             return if (resultSet.next()) {
714                 resultSet.getString("username")
715             } else {
716                 null
717             }
718         }
719     }
720
721     private fun getTokenIfUserExist(connection: Connection,
                                     username: String): String? {
722         val query = "SELECT token FROM Users WHERE username =
                        ?"
723         connection.prepareStatement(query).use {
            preparedStatement ->
724             preparedStatement.setString(1, username)
725             val resultSet = preparedStatement.executeQuery()
726             return if (resultSet.next()) {
727                 resultSet.getString("token")
728             } else {
729                 null
730             }
731         }
732     }
733
734     private fun insertUser(
735         connection: Connection, username: String,
736         passwordHash: String, token: String
737     ) {
738         val query = "INSERT INTO Users (username,
739                                     password_hash, token) VALUES (?, ?, ?)"
740         connection.prepareStatement(query).use {
            preparedStatement ->
739             preparedStatement.setString(1, username)
740             preparedStatement.setString(2, passwordHash)
741             preparedStatement.setString(3, token)

```



```

742         preparedStatement.executeUpdate()
743     }
744 }
745
746 private fun generateToken(): String = UUID.randomUUID().
    toString()
747
748 private fun hashPassword(password: String): String =
749     MessageDigest.getInstance("SHA-256")
750         .digest(password.toByteArray())
751         .joinToString("") { "%02x".format(it) }
752 }
753
754 Topic.kt
755 package suai.vladcto.services.topic
756
757 import kotlinx.serialization.Serializable
758
759 @Serializable
760 data class Topic(val id: Int, val name: String)
761 TopicService.kt
762 package suai.vladcto.services.topic
763
764 import suai.vladcto.db.DatabaseFactory
765 import java.sql.SQLException
766
767 class TopicService {
768
769     fun getTopicNameById(topicId: Int): String? {
770         val query = "SELECT name FROM Topics WHERE id = ?"
771
772         return try {
773             val connection = DatabaseFactory.getConnection()
774
775             connection.prepareStatement(query).use {
776                 preparedStatement ->
777                 preparedStatement.setInt(1, topicId)
778                 val resultSet = preparedStatement.
779                     executeQuery()
780
781                 if (resultSet.next()) {

```

```

780         resultSet.getString("name")
781     } else {
782         null
783     }
784 }
785 } catch (e: SQLException) {
786     null
787 }
788 }
789
790 fun getAllTopics(): List<Topic> {
791     try {
792         val query = "SELECT id, name FROM Topics"
793         val topics = mutableListOf<Topic>()
794         val connection = DatabaseFactory.getConnection()
795         connection.createStatement().use { statement ->
796             val resultSet = statement.executeQuery(query)
797             while (resultSet.next()) {
798                 val id = resultSet.getInt("id")
799                 val name = resultSet.getString("name")
800                 topics.add(Topic(id, name))
801             }
802         }
803         return topics
804     } catch (e: SQLException) {
805         return listOf()
806     }
807 }
808 }
809
810
811 app_providers.dart
812 import 'package:conference_app/features/app/
      navigation_manager.dart';
813 import 'package:conference_app/features/di/auth_providers.
      dart';
814 import 'package:dio/dio.dart';
815 import 'package:flutter/cupertino.dart';
816 import 'package:flutter_riverpod/flutter_riverpod.dart';
817
818 sealed class AppProviders {

```

```

819     static final dioBaseOptions = Provider(
820       (_) => BaseOptions(baseUrl: 'http://10.0.2.2:8080'),
821     );
822
823     static final dio = Provider(
824       (ref) => Dio(
825         ref.watch(dioBaseOptions),
826       )..interceptors.add(
827         ref.watch(
828           AuthProviders.interceptor,
829         ),
830       ),
831     );
832
833     static final navigatorKey = Provider(
834       (_) => GlobalKey<NavigatorState>(),
835     );
836
837     static final navigationManager = Provider(
838       (ref) => NavigationManager(ref.watch(navigatorKey)),
839     );
840 }
841
842 auth_providers.dart
843 import 'package:conference_app/features/auth/data/auth_api.
      dart';
844 import 'package:conference_app/features/auth/logic/%20network
      /auth_interceptor.dart';
845 import 'package:conference_app/features/auth/logic/manager/
      auth_manager.dart';
846 import 'package:conference_app/features/auth/logic/state/
      token_holder.dart';
847 import 'package:conference_app/features/di/app_providers.dart
      ';
848 import 'package:dio/dio.dart';
849 import 'package:flutter_riverpod/flutter_riverpod.dart';
850
851 sealed class AuthProviders {
852   static final _tokenProvider = Provider(
853     (_) => TokenStateHolder(),
854   );

```

```

855
856     static final _dio = Provider(
857         (ref) => Dio(
858             ref.watch(AppProviders.dioBaseOptions),
859         ),
860     );
861
862     static final _api = Provider(
863         (ref) => AuthApi(
864             ref.watch(_dio),
865         ),
866     );
867
868     static final manager = Provider(
869         (ref) => AuthManager(
870             ref.watch(_api),
871             ref.watch(_tokenProvider),
872             ref.watch(AppProviders.navigationManager),
873         ),
874     );
875
876     static final interceptor = Provider(
877         (ref) => AuthInterceptor(
878             ref.watch(_tokenProvider),
879         ),
880     );
881 }
882
883 conference_providers.dart
884 import 'package:conference_app/features/conferences/data/
      conference_api.dart';
885 import 'package:conference_app/features/conferences/logic/
      manager/conference_detailed_manager.dart';
886 import 'package:conference_app/features/di/app_providers.dart
      ';
887 import 'package:flutter_riverpod/flutter_riverpod.dart';
888
889 import '../conferences/data/models/conference_search_options.
      dart';
890 import '../conferences/data/models/conference_short_response.
      dart';

```

```

891 import '../conferences/logic/manager/conference_list_manager.
      dart';
892 import '../conferences/logic/state/conference_list_notifier.
      dart';
893 import '../conferences/logic/state/
      conference_search_options_notifier.dart';
894
895 sealed class ConferenceProviders {
896   static final _api = Provider(
897     (ref) => ConferenceApi(
898       ref.watch(AppProviders.dio),
899     ),
900   );
901
902   static final searchOptionsProvider = StateNotifierProvider<
903     ConferenceSearchOptionsNotifier,
904     ConferenceSearchOptions?>(
905     (ref) => ConferenceSearchOptionsNotifier(),
906   );
907
908   static final listProvider = StateNotifierProvider<
909     ConferenceListNotifier,
910     List<ConferenceShortResponse>?>(
911     (ref) => ConferenceListNotifier(),
912   );
913
914   static final conferenceListManager = Provider(
915     (ref) => ConferenceListManager(
916       ref.watch(_api),
917       ref.watch(AppProviders.navigationManager),
918       ref.watch(searchOptionsProvider.notifier),
919       ref.watch(listProvider.notifier),
920     ),
921   );
922
923   static final conferenceDetailedManager = Provider(
924     (ref) => ConferenceDetailedManager(
925       ref.watch(_api),
926       ref.watch(AppProviders.navigationManager),
927       ref.watch(listProvider.notifier),
928     ),
929   );

```

```

927     );
928 }
929
930 navigation_manager.dart
931 import 'package:flutter/material.dart';
932
933 import '../conferences/ui/conference_detail_screen.dart';
934 import '../conferences/ui/conference_list.dart';
935 import '../conferences/ui/create_conference_screen.dart';
936
937 class NavigationManager {
938     final GlobalKey<NavigatorState> _navigatorKey;
939
940     NavigationManager(this._navigatorKey);
941
942     void pop() => _navigatorKey.currentState?.pop();
943
944     void openConferenceList() {
945         _navigatorKey.currentState?.pushReplacement(
946             MaterialPageRoute(
947                 builder: (context) => const ConferenceListScreen(),
948             ),
949         );
950     }
951
952     void openDetailedConference(int conferenceId) {
953         _navigatorKey.currentState?.push(
954             MaterialPageRoute(
955                 builder: (context) =>
956                     ConferenceDetailScreen(conferenceId: conferenceId
957                         ),
958             );
959     }
960
961     void openCreateConferenceScreen() {
962         _navigatorKey.currentState?.push(
963             MaterialPageRoute(builder: (context) => const
964                 CreateConferenceScreen()),
965         );
966     }

```

```

966
967 void showErrorDialog() {
968     showDialog(
969         context: _navigatorKey.currentContext!,
970         builder: (context) {
971             return AlertDialog(
972                 title: const Text('Error'),
973                 content: const Text('An error occurred. Please try
974                     again later.'),
975                 actions: [
976                     TextButton(
977                         onPressed: () => Navigator.of(context).pop(),
978                         child: const Text('OK'),
979                     ),
980                 ],
981             );
982         },
983     );
984 }
985
986 auth_screen.dart
987 import 'package:conference_app/features/di/auth_providers.
988     dart';
989 import 'package:flutter/material.dart';
990 import 'package:flutter_riverpod/flutter_riverpod.dart';
991
992 class LoginForm extends ConsumerStatefulWidget {
993     const LoginForm({super.key});
994
995     @override
996     ConsumerState<LoginForm> createState() => _LoginFormState()
997         ;
998 }
999
1000 class _LoginFormState extends ConsumerState<LoginForm> {
1001     final TextEditingController _usernameController =
1002         TextEditingController();
1003     final TextEditingController _passwordController =
1004         TextEditingController();

```

```

1002 @override
1003 Widget build(BuildContext context) {
1004     final authManager = ref.watch(AuthProviders.manager);
1005
1006     return Scaffold(
1007         appBar: AppBar(
1008             title: const Text('Login'),
1009         ),
1010         body: Center(
1011             child: Padding(
1012                 padding: const EdgeInsets.all(16.0),
1013                 child: Column(
1014                     mainAxisAlignment: MainAxisAlignment.min,
1015                     children: [
1016                         TextField(
1017                             controller: _usernameController,
1018                             decoration: const InputDecoration(
1019                                 labelText: 'Username',
1020                                 border: OutlineInputBorder(),
1021                             ),
1022                         ),
1023                         const SizedBox(height: 16),
1024                         TextField(
1025                             controller: _passwordController,
1026                             decoration: const InputDecoration(
1027                                 labelText: 'Password',
1028                                 border: OutlineInputBorder(),
1029                             ),
1030                             obscureText: true,
1031                         ),
1032                         const SizedBox(height: 24),
1033                         ElevatedButton(
1034                             onPressed: () => authManager.login(
1035                                 _usernameController.text.trim(),
1036                                 _passwordController.text.trim(),
1037                             ),
1038                             style: ElevatedButton.styleFrom(
1039                                 padding:
1040                                     const EdgeInsets.symmetric(horizontal:
1041                                         32, vertical: 12),

```



```

1042         child: const Text('Login'),
1043       ),
1044     ],
1045   ),
1046 ),
1047 ),
1048 );
1049 }
1050
1051 @override
1052 void dispose() {
1053   _usernameController.dispose();
1054   _passwordController.dispose();
1055   super.dispose();
1056 }
1057 }
1058
1059 logic
1060 import 'package:conference_app/features/auth/logic/state/
    token_holder.dart';
1061 import 'package:dio/dio.dart';
1062
1063 class AuthInterceptor extends Interceptor {
1064   final TokenGetter _tokenGetter;
1065
1066   AuthInterceptor(this._tokenGetter);
1067
1068   @override
1069   void onRequest(RequestOptions options,
    RequestInterceptorHandler handler) {
1070     final token = _tokenGetter.token;
1071     handler.next(
1072       options..headers['Authorization'] = token,
1073     );
1074   }
1075 }
1076
1077 token_holder.dart
1078 abstract interface class TokenGetter {
1079   String? get token;
1080 }

```

```

1081
1082 class TokenStateHolder implements TokenGetter {
1083     @override
1084     String? token;
1085 }
1086
1087 auth_manager.dart
1088 import 'package:conference_app/features/app/
      navigation_manager.dart';
1089 import 'package:conference_app/features/auth/data/auth_api.
      dart';
1090 import 'package:conference_app/features/auth/logic/state/
      token_holder.dart';
1091
1092 class AuthManager {
1093     final AuthApi _api;
1094     final TokenStateHolder _tokenStateHolder;
1095     final NavigationManager _navigationManager;
1096
1097     AuthManager(
1098         this._api,
1099         this._tokenStateHolder,
1100         this._navigationManager,
1101     );
1102
1103     Future<void> login(String username, String password) async
1104     {
1105         try {
1106             final token = await _api.authorize(username, password);
1107             _tokenStateHolder.token = token;
1108             _navigationManager.openConferenceList();
1109         } on Object {
1110             _navigationManager.showErrorDialog();
1111         }
1112     }
1113
1114 auth_api.dart
1115 import 'package:dio/dio.dart';
1116
1117 class AuthApi {

```

```

1118     final Dio _dio;
1119
1120     AuthApi( this ._dio );
1121
1122     Future<String> authorize( String username , String password )
1123         async {
1124         final response = await _dio.post( '/authorize ',
1125             queryParameters: {
1126                 'name': username ,
1127                 'password': password ,
1128             });
1129         return response.data[ 'token ' ];
1130     }
1131 }
1132
1133 conference_list.dart
1134 import 'package:conference_app/features/conferences/data/
1135     models/topic.dart';
1136 import 'package:conference_app/features/conferences/ui/
1137     widgets/conference_card.dart';
1138 import 'package:conference_app/features/di/
1139     conference_providers.dart';
1140 import 'package:flutter/material.dart';
1141 import 'package:flutter_riverpod/flutter_riverpod.dart';
1142
1143 import '../data/models/city.dart';
1144 import '../logic/manager/conference_list_manager.dart';
1145
1146 class ConferenceListScreen extends ConsumerStatefulWidget {
1147     const ConferenceListScreen({ super.key });
1148
1149     @override
1150     ConsumerState<ConferenceListScreen> createState() =>
1151         _ConferenceListScreenState();
1152 }
1153
1154 class _ConferenceListScreenState extends ConsumerState<
1155     ConferenceListScreen> {
1156     late ConferenceListManager _conferenceListManager;
1157     final _nameController = TextEditingController();

```

```

1153 String? _nameFilter;
1154 int? _cityFilter;
1155 int? _topicFilter;
1156
1157 @override
1158 void initState() {
1159     super.initState();
1160     _conferenceListManager =
1161         ref.read(ConferenceProviders.conferenceListManager);
1162     WidgetsBinding.instance.addPostFrameCallback((_) {
1163         _conferenceListManager.fetch();
1164     });
1165 }
1166
1167 @override
1168 Widget build(BuildContext context) {
1169     final searchOptions = ref.watch(ConferenceProviders.
1170         searchOptionsProvider);
1171     final conferenceList = ref.watch(ConferenceProviders.
1172         listProvider);
1173
1174     return Scaffold(
1175         appBar: AppBar(title: const Text('Conferences')),
1176         floatingActionButton: FloatingActionButton(
1177             onPressed: () {
1178                 _conferenceListManager.openCreateConferenceScreen()
1179             },
1180         child: const Icon(Icons.add),
1181     ),
1182     body: Column(
1183         children: [
1184             Padding(
1185                 padding: const EdgeInsets.all(16.0),
1186                 child: Column(
1187                     children: [
1188                         _buildTextInput(
1189                             'Name',
1190                             (value) => setState(() => _nameFilter =
1191                                 value),

```

```

1190         if (searchOptions != null)
1191             Row(
1192                 children: [
1193                     Expanded(
1194                         child: _buildDropDownInput(
1195                             'City',
1196                             searchOptions.cities.cast<City?>().
1197                                 firstWhere(
1198                                     (city) => city?.id ==
1199                                         _cityFilter,
1200                                     orElse: () => null,
1201                                     ),
1202                             searchOptions.cities,
1203                             (value) => value.name,
1204                             (value) => setState(() =>
1205                                 _cityFilter = value?.id),
1206                             ),
1207                     ),
1208                     const SizedBox(width: 16),
1209                     Expanded(
1210                         child: _buildDropDownInput(
1211                             'Topic',
1212                             searchOptions.topics.cast<Topic?>().
1213                                 firstWhere(
1214                                     (topic) => topic?.id ==
1215                                         _topicFilter,
1216                                     orElse: () => null,
1217                                     ),
1218                             searchOptions.topics,
1219                             (value) => value.name,
1220                             (value) => setState(() =>
1221                                 _topicFilter = value?.id),
1222                             ),
1223                     ),
1224                 ],
1225             ),
1226             Row(
1227                 children: [
1228                     ElevatedButton(
1229                         onPressed: () {
1230                             _conferenceListManager.updateSearch(

```

```

1225         name: _nameFilter ,
1226         cityId: _cityFilter ,
1227         topicId: _topicFilter ,
1228     );
1229 },
1230     child: const Text('Apply Filters ') ,
1231 ),
1232 const SizedBox(width: 16),
1233 ElevatedButton(
1234     onPressed: () {
1235         setState(() {
1236             _nameFilter = null;
1237             _cityFilter = null;
1238             _topicFilter = null;
1239             _nameController.clear();
1240         });
1241         _conferenceListManager.updateSearch(
1242             name: null ,
1243             cityId: null ,
1244             topicId: null ,
1245         );
1246     },
1247     child: const Text('Reset Filters ') ,
1248 ),
1249 ],
1250 ),
1251 ],
1252 ),
1253 ),
1254 Expanded(
1255     child: conferenceList == null
1256         ? const Center(child:
1257             CircularProgressIndicator())
1258         : ListView.builder(
1259             itemCount: conferenceList.length ,
1260             itemBuilder: (context , index) {
1261                 return GestureDetector(
1262                     onTap: () => _conferenceListManager
1263                         .openDetailedScreen(
1264                             conferenceList[index].id) ,
1265                     child:

```

```

1264         ConferenceCard( conference :
                           conferenceList[index] ),
1265     );
1266     },
1267   ),
1268 ),
1269 ],
1270 ),
1271 );
1272 }
1273
1274 @override
1275 void dispose() {
1276   super.dispose();
1277   _nameController.dispose();
1278 }
1279
1280 Widget _buildTextInput(String label , ValueChanged<String>
      onChanged) {
1281   return Padding(
1282     padding: const EdgeInsets.symmetric(vertical: 8.0) ,
1283     child: TextField(
1284       controller: _nameController ,
1285       decoration: InputDecoration(
1286         labelText: label ,
1287         border: const OutlineInputBorder() ,
1288       ),
1289       onChanged: onChanged ,
1290     ),
1291   );
1292 }
1293
1294 Widget _buildDropdownInput<T, R>(
1295   String label ,
1296   T? value ,
1297   List<T> items ,
1298   String Function(T) mapper ,
1299   ValueChanged<T?> onChanged ,
1300 ) {
1301   return Padding(
1302     padding: const EdgeInsets.symmetric(vertical: 8.0) ,

```

```

1303     child: DropdownButtonFormField<T>(
1304         value: value,
1305         decoration: InputDecoration(
1306             labelText: label,
1307             border: const OutlineInputBorder(),
1308         ),
1309         items: items
1310             .map(
1311                 (item) => DropdownMenuItem<T>(
1312                     value: item,
1313                     child: Text mapper(item)),
1314             ),
1315     ),
1316     .toList(),
1317     onChanged: onChanged,
1318 );
1319 );
1320 }
1321 }
1322
1323 conference_detail_screen.dart
1324 import 'package:conference_app/features/conferences/data/
1325     models/conference_detail_response.dart';
1326 import 'package:conference_app/features/di/
1327     conference_providers.dart';
1328 import 'package:flutter/material.dart';
1329 import 'package:flutter_riverpod/flutter_riverpod.dart';
1330
1331 import '../data/models/conference_updating_request.dart';
1332 import '../logic/manager/conference_detailed_manager.dart';
1333
1334 class ConferenceDetailScreen extends ConsumerStatefulWidget {
1335     final int conferenceId;
1336
1337     const ConferenceDetailScreen({super.key, required this.
1338         conferenceId});
1339
1340     @override
1341     ConsumerState<ConferenceDetailScreen> createState() =>
1342         _ConferenceDetailScreenState();
1343 }

```



```

1341
1342 class _ConferenceDetailScreenState
1343     extends ConsumerState<ConferenceDetailScreen> {
1344     late ConferenceDetailedManager _conferenceDetailedManager;
1345     late Future<ConferenceDetailResponse>
1346         _conferenceDetailFuture;
1347     final TextEditingController _nameController =
1348         TextEditingController();
1349
1350     @override
1351     void initState() {
1352         super.initState();
1353         _conferenceDetailedManager =
1354             ref.read(ConferenceProviders.
1355                 conferenceDetailedManager);
1356         _conferenceDetailFuture =
1357             _conferenceDetailedManager.getDetailedConference(
1358                 widget.conferenceId);
1359     }
1360
1361     @override
1362     Widget build(BuildContext context) {
1363         return Scaffold(
1364             appBar: AppBar(title: const Text('Conference Details')),
1365             body: FutureBuilder<ConferenceDetailResponse>(
1366                 future: _conferenceDetailFuture,
1367                 builder: (context, snapshot) {
1368                     if (snapshot.connectionState == ConnectionState.
1369                         waiting) {
1370                         return const Center(child:
1371                             CircularProgressIndicator());
1372                     }
1373                     if (snapshot.hasError || !snapshot.hasData) {
1374                         return const Center(
1375                             child: Text('Error loading conference details')
1376                         );
1377                     }
1378
1379                     final conference = snapshot.data!;

```

```

1374     _nameController.text = conference.name;
1375
1376     return Padding(
1377       padding: const EdgeInsets.all(16.0),
1378       child: Column(
1379         crossAxisAlignment: CrossAxisAlignment.start,
1380         children: [
1381           if (conference.canRedact)
1382             TextField(
1383               enabled: conference.canRedact,
1384               controller: _nameController,
1385               decoration: const InputDecoration(
1386                 labelText: 'Name', border:
1387                   OutlineInputBorder()),
1388             else
1389               Text('Name: ${conference.name}',
1390                 style: Theme.of(context).textTheme.
1391                   bodyLarge),
1392             const SizedBox(height: 8),
1393             Text('City: ${conference.city}'),
1394             Text('Topic: ${conference.topic}'),
1395             const SizedBox(height: 8),
1396             Text('Start Date: ${conference.startDate}'),
1397             Text('End Date: ${conference.endDate}'),
1398             const SizedBox(height: 16),
1399             Text('Description: ${conference.description}'),
1400             Text('Contacts: ${conference.contacts}'),
1401             if (conference.canRedact) ...[
1402               const SizedBox(height: 16),
1403               Row(
1404                 mainAxisAlignment: MainAxisAlignment.
1405                   spaceBetween,
1406                 children: [
1407                   ElevatedButton(
1408                     onPressed: () async {
1409                       await _conferenceDetailedManager.
1410                         updateConference(
1411                           conference.id,
1412                           ConferenceUpdatingRequest(

```

```

1410         name: _nameController.text,
1411       ),
1412     );
1413   },
1414   child: const Text('Update'),
1415 ),
1416 ElevatedButton(
1417   onPressed: () async {
1418     await _conferenceDetailedManager
1419       .deleteConference(conference.id
1420         );
1421     // Optionally, navigate back or
1422     show a confirmation
1423   },
1424   style: ElevatedButton.styleFrom(
1425     foregroundColor: Colors.red,
1426   ),
1427   child: const Text('Delete'),
1428 ),
1429 ],
1430 ),
1431 ),
1432 );
1433 },
1434 ),
1435 );
1436 }
1437
1438 @override
1439 void dispose() {
1440   _nameController.dispose();
1441   super.dispose();
1442 }
1443 }
1444
1445 create_conference_screen.dart
1446 import 'package:conference_app/features/conferences/data/
models/conference_request.dart';

```

```

1447 import 'package:conference_app/features/di/
      conference_providers.dart';
1448 import 'package:flutter/material.dart';
1449 import 'package:flutter_riverpod/flutter_riverpod.dart';
1450
1451 class CreateConferenceScreen extends ConsumerStatefulWidget {
1452   const CreateConferenceScreen({super.key});
1453
1454   @override
1455   ConsumerState<CreateConferenceScreen> createState() =>
1456     _CreateConferenceScreenState();
1457 }
1458
1459 class _CreateConferenceScreenState
1460   extends ConsumerState<CreateConferenceScreen> {
1461   final TextEditingController _nameController =
1462     TextEditingController();
1463   final TextEditingController _descriptionController =
1464     TextEditingController();
1465   final TextEditingController _contactsController =
1466     TextEditingController();
1467   final TextEditingController _imageUrlController =
1468     TextEditingController();
1469
1470   String? _selectedCity;
1471   String? _selectedTopic;
1472   DateTime? _selectedStartDate;
1473   DateTime? _selectedEndDate;
1474
1475   @override
1476   Widget build(BuildContext context) {
1477     final searchOptions = ref.watch(ConferenceProviders.
1478       searchOptionsProvider);
1479     final conferenceListManager =
1480       ref.watch(ConferenceProviders.conferenceListManager);
1481
1482     return Scaffold(
1483       appBar: AppBar(title: const Text('Create Conference')),
1484       body: Padding(
1485         padding: const EdgeInsets.all(16.0),
1486         child: ListView(

```

```

1482     children: [
1483         _buildTextInput('Name', _nameController),
1484         _buildTextInput('Description',
1485             _descriptionController),
1486         _buildTextInput('Contacts', _contactsController),
1487         _buildDatePicker(context, 'Start Date',
1488             _selectedStartDate, (date) {
1489             setState(() => _selectedStartDate = date);
1490         })),
1491         _buildDatePicker(context, 'End Date',
1492             _selectedEndDate, (date) {
1493             setState(() => _selectedEndDate = date);
1494         })),
1495         // _buildTextInput('Image URL',
1496             _imageUrlController),
1497         if (searchOptions != null) ...[
1498             _buildDropDownInput(
1499                 'City', searchOptions.cities.map((e) => e.
1500                     name).toList(),
1501                 (value) {
1502                     setState(() => _selectedCity = value);
1503                 })),
1504             _buildDropDownInput(
1505                 'Topic', searchOptions.topics.map((e) => e.
1506                     name).toList(),
1507                 (value) {
1508                     setState(() => _selectedTopic = value);
1509                 })),
1510         ],
1511         const SizedBox(height: 16),
1512         ElevatedButton(
1513             onPressed: () async {
1514                 if (_selectedCity == null ||
1515                     _selectedTopic == null ||
1516                     _selectedStartDate == null ||
1517                     _selectedEndDate == null) {
1518                     return;
1519                 }
1520                 final request = ConferenceRequest(
1521                     name: _nameController.text,

```

```

1517         cityId: searchOptions?.cities
1518             .firstWhere((e) => e.name ==
1519                 _selectedCity)
1520             .id ??
1521             -1,
1522         topicId: searchOptions?.topics
1523             .firstWhere((e) => e.name ==
1524                 _selectedTopic)
1525             .id ??
1526             -1,
1527         startDate: _selectedStartDate!.
1528             toIso8601String(),
1529         endDate: _selectedEndDate!.toIso8601String
1530             (),
1531         description: _descriptionController.text,
1532         contacts: _contactsController.text,
1533         imageUrl: _imageUrlController.text,
1534     );
1535
1536     await conferenceListManager.createConference(
1537         request);
1538
1539     },
1540     child: const Text('Create Conference'),
1541 ),
1542 ],
1543 ),
1544 ),
1545 );
1546 }
1547
1548 Widget _buildTextInput(String label, TextEditingController
1549     controller) {
1550     return Padding(
1551         padding: const EdgeInsets.symmetric(vertical: 8.0),
1552         child: TextField(
1553             decoration: InputDecoration(
1554                 labelText: label,
1555                 border: const OutlineInputBorder(),
1556             ),
1557             controller: controller,
1558         ),
1559     ),

```

```

1552     );
1553 }
1554
1555 Widget _buildDropDownInput(
1556     String label, List<String> items, ValueChanged<String?>
1557         onChanged) {
1558     return Padding(
1559         padding: const EdgeInsets.symmetric(vertical: 8.0),
1560         child: DropdownButtonFormField<String>(
1561             decoration: InputDecoration(
1562                 labelText: label,
1563                 border: const OutlineInputBorder(),
1564             ),
1565             items: items
1566                 .map((item) =>
1567                     DropdownMenuItem<String>(value: item, child:
1568                         Text(item)))
1569                 .toList(),
1570             onChanged: onChanged,
1571         );
1572 }
1573
1574 Widget _buildDatePicker(BuildContext context, String label,
1575     DateTime? selectedDate, ValueChanged<DateTime?>
1576         onDateSelected) {
1577     return Padding(
1578         padding: const EdgeInsets.symmetric(vertical: 8.0),
1579         child: InkWell(
1580             onTap: () async {
1581                 DateTime? pickedDate = await showDatePicker(
1582                     context: context,
1583                     initialDate: selectedDate ?? DateTime.now(),
1584                     firstDate: DateTime(2000),
1585                     lastDate: DateTime(2100),
1586                 );
1587                 onDateSelected(pickedDate);
1588             },
1589             child: InputDecorator(
1590                 decoration: InputDecoration(
1591                     labelText: label,

```

```

1590         border: const OutlineInputBorder(),
1591     ),
1592     child: Text(selectedDate != null
1593         ? selectedDate.toLocal().toString().split(' ')[0]
1594         : 'Select Date'),
1595 ),
1596 ),
1597 );
1598 }
1599
1600 @override
1601 void dispose() {
1602     _nameController.dispose();
1603     _descriptionController.dispose();
1604     _contactsController.dispose();
1605     _imageUrlController.dispose();
1606     super.dispose();
1607 }
1608 }
1609
1610 conference_card.dart
1611 import 'package:flutter/material.dart';
1612
1613 import '../data/models/conference_short_response.dart';
1614
1615 class ConferenceCard extends StatelessWidget {
1616     final ConferenceShortResponse conference;
1617
1618     const ConferenceCard({super.key, required this.conference})
1619         ;
1620
1621     @override
1622     Widget build(BuildContext context) => Card(
1623         elevation: 6,
1624         shape: RoundedRectangleBorder(
1625             borderRadius: BorderRadius.circular(12),
1626         ),
1627         margin: const EdgeInsets.symmetric(vertical: 8,
1628             horizontal: 16),
1629         child: Padding(

```



```

1628 padding: const EdgeInsets.all(16),
1629 child: Column(
1630   crossAxisAlignment: CrossAxisAlignment.start,
1631   children: [
1632     Text(
1633       conference.name,
1634       style: Theme.of(context).textTheme.
         titleMedium?.copyWith(
1635         fontWeight: FontWeight.bold,
1636         color: Colors.black45,
1637       ),
1638     ),
1639     const SizedBox(height: 12),
1640     Row(
1641       children: [
1642         const Icon(Icons.location_city, size: 16,
           color: Colors.black45),
1643         const SizedBox(width: 4),
1644         Text(
1645           conference.city,
1646           style: Theme.of(context).textTheme.
             bodyMedium,
1647         ),
1648       ],
1649     ),
1650     Row(
1651       children: [
1652         const Icon(Icons.topic, size: 16, color:
           Colors.black45),
1653         const SizedBox(width: 4),
1654         Text(
1655           conference.topic,
1656           style: Theme.of(context).textTheme.
             bodyMedium,
1657         ),
1658       ],
1659     ),
1660     const SizedBox(height: 12),
1661     Divider(color: Colors.grey[300]),
1662     const SizedBox(height: 8),
1663     Row(

```

```

1664         children: [
1665             const Icon(Icons.date_range, size: 16,
1666                 color: Colors.black45),
1667             const SizedBox(width: 4),
1668             Text(
1669                 'Start: ${conference.startDate}',
1670                 style: Theme.of(context).textTheme.
1671                     bodyMedium,
1672             ),
1673         ],
1674     ),
1675     Row(
1676         children: [
1677             const Icon(Icons.date_range, size: 16,
1678                 color: Colors.black45),
1679             const SizedBox(width: 4),
1680             Text(
1681                 'End: ${conference.endDate}',
1682                 style: Theme.of(context).textTheme.
1683                     bodyMedium,
1684             ),
1685         ],
1686     ),
1687 ],
1688 );
1689 }
1690
1691 conference_search_options_notifier.dart
1692 import 'package:flutter_riverpod/flutter_riverpod.dart';
1693
1694 import '../data/models/conference_search_options.dart';
1695
1696 class ConferenceSearchOptionsNotifier
1697     extends StateNotifier<ConferenceSearchOptions?> {
1698     ConferenceSearchOptionsNotifier() : super(null);
1699
1700     void updateSearchOptions(ConferenceSearchOptions? options)
1701     {
1702         state = options;
1703     }
1704 }

```

```

1700     }
1701 }
1702 conference_list_notifier.dart
1703 import 'package:flutter_riverpod/flutter_riverpod.dart';
1704
1705 import '../.. / data / models / conference_short_response.dart';
1706
1707 class ConferenceListNotifier
1708     extends StateNotifier<List<ConferenceShortResponse>?> {
1709     ConferenceListNotifier() : super(null);
1710
1711     void updateConferenceList(List<ConferenceShortResponse>?
1712         conferenceList) {
1713         state = conferenceList;
1714     }
1715
1716     void removeConference(int conferenceId) {
1717         state = state?.where((item) => item.id != conferenceId).
1718             toList();
1719     }
1720 }
1721
1722 conference_list_manager.dart
1723 import 'package:conference_app/features/app/
1724     navigation_manager.dart';
1725 import 'package:conference_app/features/conferences/data/
1726     conference_api.dart';
1727 import 'package:conference_app/features/conferences/data/
1728     models/conference_request.dart';
1729
1730 import '../state/conference_list_notifier.dart';
1731 import '../state/conference_search_options_notifier.dart';
1732
1733 class ConferenceListManager {
1734     final ConferenceApi _api;
1735     final NavigationManager _navigationManager;
1736     final ConferenceSearchOptionsNotifier
1737         _conferenceSearchOptionsNotifier;
1738     final ConferenceListNotifier _conferenceListNotifier;
1739
1740     ConferenceListManager(

```

```

1735     this._api ,
1736     this._navigationManager ,
1737     this._conferenceSearchOptionsNotifier ,
1738     this._conferenceListNotifier ,
1739 );
1740
1741 Future<void> fetch() async {
1742     try {
1743         final options = await _api.getSearchOptions();
1744         _conferenceSearchOptionsNotifier.updateSearchOptions(
1745             options);
1746         final list = await _api.getConferencesList();
1747         _conferenceListNotifier.updateConferenceList(list);
1748     } on Object {
1749         _navigationManager.showErrorDialog();
1750         rethrow;
1751     }
1752 }
1753
1754 Future<void> updateSearch({int? cityId , int? topicId ,
1755     String? name}) async {
1756     final list = await _api.getConferencesList(
1757         cityId: cityId ,
1758         topicId: topicId ,
1759         name: name ,
1760     );
1761     _conferenceListNotifier.updateConferenceList(list);
1762 }
1763
1764 void openDetailedScreen(int conferenceId) =>
1765     _navigationManager.openDetailedConference(conferenceId)
1766     ;
1767
1768 void openCreateConferenceScreen() =>
1769     _navigationManager.openCreateConferenceScreen();
1770
1771 Future<void> createConference(ConferenceRequest request)
1772     async {
1773     try {
1774         await _api.createConference(request);
1775         _navigationManager.pop();

```

```

1772     } on Object {
1773         _navigationManager.showErrorDialog();
1774     }
1775 }
1776 }
1777
1778 conference_detailed_manager.dart
1779 import '../../../app/navigation_manager.dart';
1780 import '../../../data/conference_api.dart';
1781 import '../../../data/models/conference_detail_response.dart';
1782 import '../../../data/models/conference_updating_request.dart';
1783 import '../state/conference_list_notifier.dart';
1784
1785 class ConferenceDetailedManager {
1786     final ConferenceApi _api;
1787     final NavigationManager _navigationManager;
1788     final ConferenceListNotifier _conferenceListNotifier;
1789
1790     ConferenceDetailedManager(
1791         this._api,
1792         this._navigationManager,
1793         this._conferenceListNotifier,
1794     );
1795
1796     Future<ConferenceDetailResponse> getDetailedConference(int
        conferenceId) =>
1797         _api.getConferenceDetails(conferenceId);
1798
1799     Future<void> deleteConference(int conferenceId) async {
1800         try {
1801             await _api.deleteConference(conferenceId);
1802             _conferenceListNotifier.removeConference(conferenceId);
1803         } on Object {
1804             _navigationManager.showErrorDialog();
1805         }
1806     }
1807
1808     Future<void> updateConference(
1809         int conferenceId,
1810         ConferenceUpdatingRequest request,
1811     ) async {

```

```

1812     try {
1813         await _api.updateConference(conferenceId, request);
1814     } on Object {
1815         _navigationManager.showErrorDialog();
1816     }
1817 }
1818 }
1819
1820 conference_updating_request.dart
1821 import 'package:freezed_annotation/freezed_annotation.dart';
1822
1823 part 'conference_updating_request.freezed.dart';
1824 part 'conference_updating_request.g.dart';
1825
1826 @freezed
1827 class ConferenceUpdatingRequest with
1828     _$ConferenceUpdatingRequest {
1829     const factory ConferenceUpdatingRequest({
1830         String? name,
1831         int? cityId,
1832         int? topicId,
1833         String? startDate,
1834         String? endDate,
1835         String? description,
1836         String? contacts,
1837         String? imageUrl,
1838     }) = _ConferenceUpdatingRequest;
1839
1840     factory ConferenceUpdatingRequest.fromJson(Map<String,
1841         Object?> json) =>
1842         _$ConferenceUpdatingRequestFromJson(json);
1843 }
1844
1845 conference_search_options.g.dart
1846 // GENERATED CODE – DO NOT MODIFY BY HAND
1847
1848 part of 'conference_search_options.dart';
1849
1850 //

```

\*\*\*\*\*

```

1849 // JsonSerializerGenerator
1850 //
1851
1852 // *****
1853
1854 _$ConferenceSearchOptionsImpl _\begin{equation}\begin{
gathered} ConferenceSearchOptionsImplFromJson(
1855     Map<String , dynamic> json) =>
1856     _$ConferenceSearchOptionsImpl(
1857         cities: (json['cities '] as List<dynamic>)
1858             .map((e) => City.fromJson(e as Map<String , dynamic
>))
1859             .toList() ,
1860         topics: (json['topics '] as List<dynamic>)
1861             .map((e) => Topic.fromJson(e as Map<String , dynamic
>))
1862             .toList() ,
1863     );
1864
1865 Map<String , dynamic> _\end{gathered}\end{equation}
ConferenceSearchOptionsImplToJson(
1866     _$ConferenceSearchOptionsImpl instance) =>
1867     <String , dynamic>{
1868         'cities ': instance.cities ,
1869         'topics ': instance.topics ,
1870     };
1871
1872 conference_detail_response.dart
1873 import 'package:freezed_annotation/freezed_annotation.dart';
1874
1875 part 'conference_detail_response.freezed.dart';
1876 part 'conference_detail_response.g.dart';
1877
1878 @freezed
1879 class ConferenceDetailResponse with
    _$ConferenceDetailResponse {
1880     const factory ConferenceDetailResponse({
1881         required int id ,
1882         required String name ,
1883         required String city ,
1884         required String topic ,

```

```

1883     required String startDate ,
1884     required String endDate ,
1885     required String description ,
1886     required String contacts ,
1887     required bool canRedact ,
1888   }) = _ConferenceDetailResponse ;
1889
1890   factory ConferenceDetailResponse.fromJson(Map<String ,
1891     dynamic> json) =>
1892     _$ConferenceDetailResponseFromJson(json);
1893 }
1894
1895 conference_updating_request.freezed.dart
1896 // coverage:ignore-file
1897 // GENERATED CODE – DO NOT MODIFY BY HAND
1898 // ignore_for_file: type=lint
1899 // ignore_for_file: unused_element , deprecated_member_use ,
1900 // deprecated_member_use_from_same_package ,
1901 // use_function_type_syntax_for_parameters , unnecessary_const
1902 // , avoid_init_to_null ,
1903 // invalid_override_different_default_values_named ,
1904 // prefer_expression_function_bodies , annotate_overrides ,
1905 // invalid_annotation_target , unnecessary_question_mark
1906
1907 part of 'conference_updating_request.dart';
1908
1909 //
1910
1911 *****
1912
1913 // FreezedGenerator
1914 //
1915 *****
1916
1917
1918 T _$identity<T>(T value) => value;
1919
1920 final _privateConstructorUsedError = UnsupportedError(
1921   'It seems like you constructed your class using `MyClass.
1922     _()` . This constructor is only meant to be used by
1923     freezed and you are not supposed to need it nor use it
1924     .\nPlease check the documentation here for more

```



```

        information: https://github.com/rrousselGit/freeze#
        adding-getters-and-methods-to-our-models ');
1910
1911 ConferenceUpdatingRequest _$ConferenceUpdatingRequestFromJson
    (
1912     Map<String, dynamic> json) {
1913     return _ConferenceUpdatingRequest.fromJson(json);
1914 }
1915
1916 /// @nodoc
1917 mixin _$ConferenceUpdatingRequest {
1918     String? get name => throw _privateConstructorUsedError;
1919     int? get cityId => throw _privateConstructorUsedError;
1920     int? get topicId => throw _privateConstructorUsedError;
1921     String? get startDate => throw _privateConstructorUsedError
        ;
1922     String? get endDate => throw _privateConstructorUsedError;
1923     String? get description => throw
        _privateConstructorUsedError;
1924     String? get contacts => throw _privateConstructorUsedError;
1925     String? get imageUrl => throw _privateConstructorUsedError;
1926
1927     Map<String, dynamic> toJson() => throw
        _privateConstructorUsedError;
1928     @JsonKey(ignore: true)
1929     $ConferenceUpdatingRequestCopyWith<
        ConferenceUpdatingRequest> get copyWith =>
1930         throw _privateConstructorUsedError;
1931 }
1932
1933 /// @nodoc
1934 abstract class $ConferenceUpdatingRequestCopyWith<$Res> {
1935     factory $ConferenceUpdatingRequestCopyWith(
        ConferenceUpdatingRequest value,
1936         $Res Function(ConferenceUpdatingRequest) then) =
1937         _$ConferenceUpdatingRequestCopyWithImpl<$Res,
        ConferenceUpdatingRequest>;
1938     @useResult
1939     $Res call(
1940         {String? name,
1941         int? cityId,

```

```

1942         int? topicId ,
1943         String? startDate ,
1944         String? endDate ,
1945         String? description ,
1946         String? contacts ,
1947         String? imageUrl));
1948     }
1949
1950     /// @nodoc
1951     class _$ConferenceUpdatingRequestCopyWithImpl<$Res ,
1952         $Val extends ConferenceUpdatingRequest>
1953         implements $ConferenceUpdatingRequestCopyWith<$Res> {
1954         _$ConferenceUpdatingRequestCopyWithImpl(this._value , this .
            _then);
1955
1956         // ignore: unused_field
1957         final $Val _value;
1958         // ignore: unused_field
1959         final $Res Function($Val) _then;
1960
1961         @pragma('vm:prefer-inline ')
1962         @override
1963         $Res call({
1964             Object? name = freezed ,
1965             Object? cityId = freezed ,
1966             Object? topicId = freezed ,
1967             Object? startDate = freezed ,
1968             Object? endDate = freezed ,
1969             Object? description = freezed ,
1970             Object? contacts = freezed ,
1971             Object? imageUrl = freezed ,
1972         }) {
1973             return _then(_value.copyWith(
1974                 name: freezed == name
1975                     ? _value.name
1976                     : name // ignore: cast_nullable_to_non_nullable
1977                     as String?,
1978                 cityId: freezed == cityId
1979                     ? _value.cityId
1980                     : cityId // ignore: cast_nullable_to_non_nullable
1981                     as int?,

```

```

1982         topicId: freezed == topicId
1983             ? _value.topicId
1984             : topicId // ignore: cast_nullable_to_non_nullable
1985                 as int?,
1986         startDate: freezed == startDate
1987             ? _value.startDate
1988             : startDate // ignore:
1989                 cast_nullable_to_non_nullable
1990                 as String?,
1991         endDate: freezed == endDate
1992             ? _value.endDate
1993             : endDate // ignore: cast_nullable_to_non_nullable
1994                 as String?,
1995         description: freezed == description
1996             ? _value.description
1997             : description // ignore:
1998                 cast_nullable_to_non_nullable
1999                 as String?,
2000         contacts: freezed == contacts
2001             ? _value.contacts
2002             : contacts // ignore: cast_nullable_to_non_nullable
2003                 as String?,
2004         imageUrl: freezed == imageUrl
2005             ? _value.imageUrl
2006             : imageUrl // ignore: cast_nullable_to_non_nullable
2007                 as String?,
2008     ) as $Val);
2009 }
2010 }
2011 /// @nodoc
2012 abstract class _\begin{equation}\begin{gathered}
2013     ConferenceUpdatingRequestImplCopyWith<$Res>
2014     implements $ConferenceUpdatingRequestCopyWith<$Res> {
2015     factory _\end{gathered}\end{equation}
2016         ConferenceUpdatingRequestImplCopyWith(
2017             _$ConferenceUpdatingRequestImpl value ,
2018             $Res Function(_$ConferenceUpdatingRequestImpl) then
2019         ) =
2020     __\begin{equation}\begin{gathered}
2021         ConferenceUpdatingRequestImplCopyWithImpl<$Res>;

```

```

2017  @override
2018  @useResult
2019  $Res call(
2020      {String? name,
2021      int? cityId,
2022      int? topicId,
2023      String? startDate,
2024      String? endDate,
2025      String? description,
2026      String? contacts,
2027      String? imageUrl});
2028  }
2029
2030  /// @nodoc
2031  class __\end{gathered}\end{equation}
      ConferenceUpdatingRequestImplCopyWithImpl<$Res>
2032      extends _$ConferenceUpdatingRequestCopyWithImpl<$Res,
2033          _$ConferenceUpdatingRequestImpl>
2034      implements _\begin{equation}\begin{gathered}
          ConferenceUpdatingRequestImplCopyWith<$Res> {
2035  __\end{gathered}\end{equation}
          ConferenceUpdatingRequestImplCopyWithImpl(
2036          _$ConferenceUpdatingRequestImpl _value,
2037          $Res Function(_$ConferenceUpdatingRequestImpl) _then)
2038          : super(_value, _then);
2039
2040  @pragma('vm:prefer-inline')
2041  @override
2042  $Res call({
2043      Object? name = freezed,
2044      Object? cityId = freezed,
2045      Object? topicId = freezed,
2046      Object? startDate = freezed,
2047      Object? endDate = freezed,
2048      Object? description = freezed,
2049      Object? contacts = freezed,
2050      Object? imageUrl = freezed,
2051  }) {
2052      return _then(_$ConferenceUpdatingRequestImpl(
2053          name: freezed == name
2054          ? _value.name

```

```

2055         : name // ignore: cast_nullable_to_non_nullable
2056             as String?,
2057     cityId: freezed == cityId
2058         ? _value.cityId
2059         : cityId // ignore: cast_nullable_to_non_nullable
2060             as int?,
2061     topicId: freezed == topicId
2062         ? _value.topicId
2063         : topicId // ignore: cast_nullable_to_non_nullable
2064             as int?,
2065     startDate: freezed == startDate
2066         ? _value.startDate
2067         : startDate // ignore:
                cast_nullable_to_non_nullable
                as String?,
2068     endDate: freezed == endDate
2069         ? _value.endDate
2070         : endDate // ignore: cast_nullable_to_non_nullable
2071             as String?,
2072     description: freezed == description
2073         ? _value.description
2074         : description // ignore:
                cast_nullable_to_non_nullable
                as String?,
2075     contacts: freezed == contacts
2076         ? _value.contacts
2077         : contacts // ignore: cast_nullable_to_non_nullable
2078             as String?,
2079     imageUrl: freezed == imageUrl
2080         ? _value.imageUrl
2081         : imageUrl // ignore: cast_nullable_to_non_nullable
2082             as String?,
2083     ));
2084 }
2085 }
2086
2087
2088
2089 /// @nodoc
2090 @JsonSerializable()
2091 class _$ConferenceUpdatingRequestImpl implements
    _ConferenceUpdatingRequest {
2092     const _$ConferenceUpdatingRequestImpl(

```

```

2093         {this.name,
2094         this.cityId,
2095         this.topicId,
2096         this.startDate,
2097         this.endDate,
2098         this.description,
2099         this.contacts,
2100         this.imageUrl});
2101
2102     factory _$ConferenceUpdatingRequestImpl.fromJson(Map<String
        , dynamic> json) =>
2103         _\begin{equation}\begin{gathered}
            ConferenceUpdatingRequestImplFromJson(json);
2104
2105     @override
2106     final String? name;
2107     @override
2108     final int? cityId;
2109     @override
2110     final int? topicId;
2111     @override
2112     final String? startDate;
2113     @override
2114     final String? endDate;
2115     @override
2116     final String? description;
2117     @override
2118     final String? contacts;
2119     @override
2120     final String? imageUrl;
2121
2122     @override
2123     String toString() {
2124         return 'ConferenceUpdatingRequest(name: $name, cityId:
            $cityId, topicId: $topicId, startDate: $startDate,
            endDate: $endDate, description: $description, contacts
            : $contacts, imageUrl: $imageUrl)';
2125     }
2126
2127     @override
2128     bool operator ==(Object other) {

```

```

2129     return identical(this , other) ||
2130         (other.runtimeType == runtimeType &&
2131             other is _$ConferenceUpdatingRequestImpl &&
2132             (identical(other.name , name) || other.name ==
                name) &&
2133             (identical(other.cityId , cityId) || other.cityId
                == cityId) &&
2134             (identical(other.topicId , topicId) || other.
                topicId == topicId) &&
2135             (identical(other.startDate , startDate) ||
2136                 other.startDate == startDate) &&
2137             (identical(other.endDate , endDate) || other.
                endDate == endDate) &&
2138             (identical(other.description , description) ||
2139                 other.description == description) &&
2140             (identical(other.contacts , contacts) ||
2141                 other.contacts == contacts) &&
2142             (identical(other.imageUrl , imageUrl) ||
2143                 other.imageUrl == imageUrl));
2144 }
2145
2146 @JsonKey(ignore: true)
2147 @override
2148 int get hashCode => Object.hash(runtimeType , name , cityId ,
    topicId , startDate ,
2149     endDate , description , contacts , imageUrl);
2150
2151 @JsonKey(ignore: true)
2152 @override
2153 @pragma( 'vm:prefer-inline ' )
2154 _\end{gathered}\end{equation}
    ConferenceUpdatingRequestImplCopyWith<
        _$ConferenceUpdatingRequestImpl>
2155     get copyWith => __\begin{equation}\begin{gathered}
        ConferenceUpdatingRequestImplCopyWithImpl<
2156             _$ConferenceUpdatingRequestImpl>(this , _$identity);
2157
2158 @override
2159 Map<String , dynamic> toJson() {
2160     return _\end{gathered}\end{equation}
        ConferenceUpdatingRequestImplToJson(

```

```

2161         this ,
2162     );
2163 }
2164 }
2165
2166 abstract class _ConferenceUpdatingRequest implements
    ConferenceUpdatingRequest {
2167     const factory _ConferenceUpdatingRequest(
2168         {final String? name,
2169         final int? cityId ,
2170         final int? topicId ,
2171         final String? startDate ,
2172         final String? endDate ,
2173         final String? description ,
2174         final String? contacts ,
2175         final String? imageUrl}) =
            _$ConferenceUpdatingRequestImpl;
2176
2177     factory _ConferenceUpdatingRequest.fromJson (Map<String ,
        dynamic> json) =
            _$ConferenceUpdatingRequestImpl.fromJson;
2178
2179
2180     @override
2181     String? get name;
2182     @override
2183     int? get cityId;
2184     @override
2185     int? get topicId;
2186     @override
2187     String? get startDate;
2188     @override
2189     String? get endDate;
2190     @override
2191     String? get description;
2192     @override
2193     String? get contacts;
2194     @override
2195     String? get imageUrl;
2196     @override
2197     @JsonKey(ignore: true)

```



```

2198   _\begin{equation}\begin{gathered}
        ConferenceUpdatingRequestImplCopyWith<
        _$ConferenceUpdatingRequestImpl>
2199       get copyWith => throw _privateConstructorUsedError;
2200   }
2201
2202   conference_short_response.dart
2203   import 'package:freezed_annotation/freezed_annotation.dart';
2204
2205   part 'conference_short_response.freezed.dart';
2206   part 'conference_short_response.g.dart';
2207
2208   @freezed
2209   class ConferenceShortResponse with _$ConferenceShortResponse
        {
2210       const factory ConferenceShortResponse({
2211           required int id,
2212           required String name,
2213           required String city,
2214           required String topic,
2215           required String startDate,
2216           required String endDate,
2217       }) = _ConferenceShortResponse;
2218
2219       factory ConferenceShortResponse.fromJson(Map<String,
           dynamic> json) =>
2220           _$ConferenceShortResponseFromJson(json);
2221   }
2222
2223   conference_short_response.freezed.dart
2224   // coverage: ignore-file
2225   // GENERATED CODE - DO NOT MODIFY BY HAND
2226   // ignore_for_file: type=lint
2227   // ignore_for_file: unused_element, deprecated_member_use,
        deprecated_member_use_from_same_package,
        use_function_type_syntax_for_parameters, unnecessary_const
        , avoid_init_to_null,
        invalid_override_different_default_values_named,
        prefer_expression_function_bodies, annotate_overrides,
        invalid_annotation_target, unnecessary_question_mark
2228

```

```

2229 part of 'conference_short_response.dart';
2230
2231 //
2232     *****
2233
2234 // FreezedGenerator
2235 //
2236     *****
2237
2238 T _$identity<T>(T value) => value;
2239
2240 final _privateConstructorUsedError = UnsupportedError(
2241     'It seems like you constructed your class using 'MyClass.
2242     _()' '. This constructor is only meant to be used by
2243     freed and you are not supposed to need it nor use it
2244     .\nPlease check the documentation here for more
2245     information: https://github.com/rrousselGit/freed#
2246     adding-getters-and-methods-to-our-models ');
2247
2248 ConferenceShortResponse _$ConferenceShortResponseFromJson(
2249     Map<String, dynamic> json) {
2250     return _ConferenceShortResponse.fromJson(json);
2251 }
2252
2253 /// @nodoc
2254 mixin _$ConferenceShortResponse {
2255     int get id => throw _privateConstructorUsedError;
2256     String get name => throw _privateConstructorUsedError;
2257     String get city => throw _privateConstructorUsedError;
2258     String get topic => throw _privateConstructorUsedError;
2259     String get startDate => throw _privateConstructorUsedError;
2260     String get endDate => throw _privateConstructorUsedError;
2261
2262     Map<String, dynamic> toJson() => throw
2263         _privateConstructorUsedError;
2264     @JsonKey(ignore: true)
2265     $ConferenceShortResponseCopyWith<ConferenceShortResponse>
2266         get copyWith =>
2267         throw _privateConstructorUsedError;
2268 }

```

```

2259
2260 /// @nodoc
2261 abstract class $ConferenceShortResponseCopyWith<$Res> {
2262     factory $ConferenceShortResponseCopyWith(
2263         ConferenceShortResponse value ,
2264         $Res Function(ConferenceShortResponse) then) =
2265         _$ConferenceShortResponseCopyWithImpl<$Res ,
2266             ConferenceShortResponse >;
2267
2268 @useResult
2269 $Res call(
2270     {int id ,
2271     String name ,
2272     String city ,
2273     String topic ,
2274     String startDate ,
2275     String endDate});
2276 }
2277
2278 /// @nodoc
2279 class _$ConferenceShortResponseCopyWithImpl<$Res ,
2280     $Val extends ConferenceShortResponse>
2281     implements $ConferenceShortResponseCopyWith<$Res> {
2282     _$ConferenceShortResponseCopyWithImpl(this._value , this._
2283         _then);
2284
2285     // ignore: unused_field
2286     final $Val _value;
2287     // ignore: unused_field
2288     final $Res Function($Val) _then;
2289
2290 @pragma('vm:prefer-inline ')
2291 @override
2292 $Res call({
2293     Object? id = null ,
2294     Object? name = null ,
2295     Object? city = null ,
2296     Object? topic = null ,
2297     Object? startDate = null ,
2298     Object? endDate = null ,
2299 }) {
2300     return _then(_value.copyWith(

```

```

2297         id: null == id
2298             ? _value.id
2299             : id // ignore: cast_nullable_to_non_nullable
2300                 as int ,
2301     name: null == name
2302         ? _value.name
2303         : name // ignore: cast_nullable_to_non_nullable
2304             as String ,
2305     city: null == city
2306         ? _value.city
2307         : city // ignore: cast_nullable_to_non_nullable
2308             as String ,
2309     topic: null == topic
2310         ? _value.topic
2311         : topic // ignore: cast_nullable_to_non_nullable
2312             as String ,
2313     startDate: null == startDate
2314         ? _value.startDate
2315         : startDate // ignore:
2316                     cast_nullable_to_non_nullable
2317                     as String ,
2317     endDate: null == endDate
2318         ? _value.endDate
2319         : endDate // ignore: cast_nullable_to_non_nullable
2320             as String ,
2321     ) as $Val);
2322 }
2323 }
2324
2325 /// @nodoc
2326 abstract class _\end{gathered}\end{equation}
2327     ConferenceShortResponseImplCopyWith<$Res>
2327     implements $ConferenceShortResponseCopyWith<$Res> {
2328     factory _\begin{equation}\begin{gathered}
2329         ConferenceShortResponseImplCopyWith(
2329         _$ConferenceShortResponseImpl value ,
2330         $Res Function(_$ConferenceShortResponseImpl) then)
2331         =
2331         __\end{gathered}\end{equation}
2332         ConferenceShortResponseImplCopyWithImpl<$Res>;
2332     @override

```

```

2333 @useResult
2334 $Res call(
2335     {int id,
2336     String name,
2337     String city,
2338     String topic,
2339     String startDate,
2340     String endDate});
2341 }
2342
2343 /// @nodoc
2344 class __\begin{equation}\begin{gathered}
    ConferenceShortResponseImplCopyWithImpl<$Res>
2345     extends _$ConferenceShortResponseCopyWithImpl<$Res,
2346         _$ConferenceShortResponseImpl>
2347     implements _\end{gathered}\end{equation}
        ConferenceShortResponseImplCopyWith<$Res> {
2348 __\begin{equation}\begin{gathered}
        ConferenceShortResponseImplCopyWithImpl(
2349     _$ConferenceShortResponseImpl _value,
2350     $Res Function(_$ConferenceShortResponseImpl) _then)
2351     : super(_value, _then);
2352
2353 @pragma('vm:prefer-inline')
2354 @override
2355 $Res call({
2356     Object? id = null,
2357     Object? name = null,
2358     Object? city = null,
2359     Object? topic = null,
2360     Object? startDate = null,
2361     Object? endDate = null,
2362 }) {
2363     return _then(_$ConferenceShortResponseImpl(
2364         id: null == id
2365             ? _value.id
2366             : id // ignore: cast_nullable_to_non_nullable
2367             as int,
2368         name: null == name
2369             ? _value.name
2370             : name // ignore: cast_nullable_to_non_nullable

```

```

2371         as String ,
2372     city: null == city
2373         ? _value.city
2374         : city // ignore: cast_nullable_to_non_nullable
2375         as String ,
2376     topic: null == topic
2377         ? _value.topic
2378         : topic // ignore: cast_nullable_to_non_nullable
2379         as String ,
2380     startDate: null == startDate
2381         ? _value.startDate
2382         : startDate // ignore:
2383             cast_nullable_to_non_nullable
2384             as String ,
2385     endDate: null == endDate
2386         ? _value.endDate
2387         : endDate // ignore: cast_nullable_to_non_nullable
2388         as String ,
2389     ));
2390 }
2391 }
2392 /// @nodoc
2393 @JsonSerializable()
2394 class _$ConferenceShortResponseImpl implements
2395     _ConferenceShortResponse {
2396     const _$ConferenceShortResponseImpl(
2397         {required this.id ,
2398         required this.name ,
2399         required this.city ,
2400         required this.topic ,
2401         required this.startDate ,
2402         required this.endDate});
2403
2404     factory _$ConferenceShortResponseImpl.fromJson(Map<String ,
2405         dynamic> json) =>
2406         _\end{gathered}\end{equation}
2407             ConferenceShortResponseImplFromJson(json);
2408
2409     @override
2410     final int id;

```

```

2408     @override
2409     final String name;
2410     @override
2411     final String city;
2412     @override
2413     final String topic;
2414     @override
2415     final String startDate;
2416     @override
2417     final String endDate;
2418
2419     @override
2420     String toString() {
2421         return 'ConferenceShortResponse(id: $id, name: $name,
2422             city: $city, topic: $topic, startDate: $startDate,
2423             endDate: $endDate)';
2424     }
2425
2426     @override
2427     bool operator ==(Object other) {
2428         return identical(this, other) ||
2429             (other.runtimeType == runtimeType &&
2430                 other is _$ConferenceShortResponseImpl &&
2431                 (identical(other.id, id) || other.id == id) &&
2432                 (identical(other.name, name) || other.name ==
2433                     name) &&
2434                 (identical(other.city, city) || other.city ==
2435                     city) &&
2436                 (identical(other.topic, topic) || other.topic ==
2437                     topic) &&
2438                 (identical(other.startDate, startDate) ||
2439                     other.startDate == startDate) &&
2440                 (identical(other.endDate, endDate) || other.
2441                     endDate == endDate));
2442     }
2443
2444     @JsonKey(ignore: true)
2445     @override
2446     int get hashCode =>
2447         Object.hash(runtimeType, id, name, city, topic,
2448             startDate, endDate);

```

```

2442
2443     @JsonKey(ignore: true)
2444     @override
2445     @pragma('vm:prefer-inline')
2446     _\begin{equation}\begin{gathered}
        ConferenceShortResponseImplCopyWith<
        _$ConferenceShortResponseImpl>
2447         get copyWith => __\end{gathered}\end{equation}
        ConferenceShortResponseImplCopyWithImpl<
        _$ConferenceShortResponseImpl>(this, _$identity);
2449
2450     @override
2451     Map<String, dynamic> toJson() {
2452         return _\begin{equation}\begin{gathered}
        ConferenceShortResponseImplToJson(
2453             this,
2454         );
2455     }
2456 }
2457
2458 abstract class _ConferenceShortResponse implements
        ConferenceShortResponse {
2459     const factory _ConferenceShortResponse(
2460         {required final int id,
2461         required final String name,
2462         required final String city,
2463         required final String topic,
2464         required final String startDate,
2465         required final String endDate}) =
        _$ConferenceShortResponseImpl;
2466
2467     factory _ConferenceShortResponse.fromJson(Map<String,
        dynamic> json) =
2468         _$ConferenceShortResponseImpl.fromJson;
2469
2470     @override
2471     int get id;
2472     @override
2473     String get name;
2474     @override
2475     String get city;

```



```

2476     @override
2477     String get topic ;
2478     @override
2479     String get startDate ;
2480     @override
2481     String get endDate ;
2482     @override
2483     @JsonKey(ignore : true )
2484     _\end{gathered}\end{equation}
        ConferenceShortResponseImplCopyWith<
        _$ConferenceShortResponseImpl>
2485         get copyWith => throw _privateConstructorUsedError ;
2486 }
2487
2488 topic.g.dart
2489 // GENERATED CODE – DO NOT MODIFY BY HAND
2490
2491 part of 'topic.dart' ;
2492
2493 //
        *****
2494 // JsonSerializerGenerator
2495 //
        *****
2496
2497 _$TopicImpl _\begin{equation}\begin{gathered}
    TopicImplFromJson(Map<String , dynamic> json) =>
    _$TopicImpl(
2498         id: (json['id'] as num).toInt() ,
2499         name: json['name'] as String ,
2500     );
2501
2502 Map<String , dynamic> _\end{gathered}\end{equation}
    TopicImplToJson(_$TopicImpl instance) =>
2503     <String , dynamic>{
2504         'id': instance.id ,
2505         'name': instance.name ,
2506     };
2507

```

```

2508 topic.freezed.dart
2509 // coverage:ignore-file
2510 // GENERATED CODE - DO NOT MODIFY BY HAND
2511 // ignore_for_file: type=lint
2512 // ignore_for_file: unused_element, deprecated_member_use,
    deprecated_member_use_from_same_package,
    use_function_type_syntax_for_parameters, unnecessary_const
    , avoid_init_to_null,
    invalid_override_different_default_values_named,
    prefer_expression_function_bodies, annotate_overrides,
    invalid_annotation_target, unnecessary_question_mark
2513
2514 part of 'topic.dart';
2515
2516 //
    *****
2517 // FreezedGenerator
2518 //
    *****
2519
2520 T _$identity<T>(T value) => value;
2521
2522 final _privateConstructorUsedError = UnsupportedError(
2523     'It seems like you constructed your class using `MyClass.
        _()`. This constructor is only meant to be used by
        freezed and you are not supposed to need it nor use it
        .\nPlease check the documentation here for more
        information: https://github.com/rrousselGit/freezed#
        adding-getters-and-methods-to-our-models') ;
2524
2525 Topic _$TopicFromJson(Map<String, dynamic> json) {
2526     return _Topic.fromJson(json);
2527 }
2528
2529 /// @nodoc
2530 mixin _$Topic {
2531     int get id => throw _privateConstructorUsedError;
2532     String get name => throw _privateConstructorUsedError;
2533

```

```

2534     Map<String , dynamic> toJson() => throw
        _privateConstructorUsedError;
2535     @JsonKey(ignore: true)
2536     $TopicCopyWith<Topic> get copyWith => throw
        _privateConstructorUsedError;
2537 }
2538
2539 /// @nodoc
2540 abstract class $TopicCopyWith<$Res> {
2541     factory $TopicCopyWith(Topic value , $Res Function(Topic)
        then) =
2542         _$TopicCopyWithImpl<$Res , Topic>;
2543     @useResult
2544     $Res call({int id , String name});
2545 }
2546
2547 /// @nodoc
2548 class _$TopicCopyWithImpl<$Res , $Val extends Topic>
2549     implements $TopicCopyWith<$Res> {
2550     _$TopicCopyWithImpl(this._value , this._then);
2551
2552     // ignore: unused_field
2553     final $Val _value;
2554     // ignore: unused_field
2555     final $Res Function($Val) _then;
2556
2557     @pragma('vm:prefer-inline')
2558     @override
2559     $Res call({
2560         Object? id = null ,
2561         Object? name = null ,
2562     }) {
2563         return _then(_value.copyWith(
2564             id: null == id
2565                 ? _value.id
2566                 : id // ignore: cast_nullable_to_non_nullable
2567                     as int ,
2568             name: null == name
2569                 ? _value.name
2570                 : name // ignore: cast_nullable_to_non_nullable
2571                     as String ,

```

```

2572     ) as $Val);
2573   }
2574 }
2575
2576 /// @nodoc
2577 abstract class _\begin{equation}\begin{gathered}
    TopicImplCopyWith<$Res> implements $TopicCopyWith<$Res> {
2578   factory _\end{gathered}\end{equation}TopicImplCopyWith(
2579     _$TopicImpl value , $Res Function(_$TopicImpl) then)
        =
2580     __\begin{equation}\begin{gathered}TopicImplCopyWithImpl
        <$Res>;
2581   @override
2582   @useResult
2583   $Res call({int id , String name});
2584 }
2585
2586 /// @nodoc
2587 class __\end{gathered}\end{equation}TopicImplCopyWithImpl<
    $Res>
2588   extends _$TopicCopyWithImpl<$Res , _$TopicImpl>
2589   implements _\begin{equation}\begin{gathered}
    TopicImplCopyWith<$Res> {
2590   __\end{gathered}\end{equation}TopicImplCopyWithImpl(
2591     _$TopicImpl _value , $Res Function(_$TopicImpl) _then)
2592     : super(_value , _then);
2593
2594   @pragma('vm:prefer-inline ')
2595   @override
2596   $Res call({
2597     Object? id = null ,
2598     Object? name = null ,
2599   }) {
2600     return _then(_$TopicImpl(
2601       id: null == id
2602         ? _value.id
2603         : id // ignore: cast_nullable_to_non_nullable
2604         as int ,
2605       name: null == name
2606         ? _value.name
2607         : name // ignore: cast_nullable_to_non_nullable

```

```

2608         as String ,
2609     ));
2610 }
2611 }
2612
2613 /// @nodoc
2614 @JsonSerializable()
2615 class _$TopicImpl implements _Topic {
2616     const _$TopicImpl({required this.id, required this.name});
2617
2618     factory _$TopicImpl.fromJson(Map<String, dynamic> json) =>
2619         _\begin{equation}\begin{gathered}TopicImplFromJson(json
                );
2620
2621     @override
2622     final int id;
2623     @override
2624     final String name;
2625
2626     @override
2627     String toString() {
2628         return 'Topic(id: $id, name: $name)';
2629     }
2630
2631     @override
2632     bool operator ==(Object other) {
2633         return identical(this, other) ||
2634             (other.runtimeType == runtimeType &&
2635                 other is _$TopicImpl &&
2636                 (identical(other.id, id) || other.id == id) &&
2637                 (identical(other.name, name) || other.name ==
                    name));
2638     }
2639
2640     @JsonKey(ignore: true)
2641     @override
2642     int get hashCode => Object.hash(runtimeType, id, name);
2643
2644     @JsonKey(ignore: true)
2645     @override
2646     @pragma('vm:prefer-inline')

```

```

2647   _\end{gathered}\end{equation}TopicImplCopyWith<_ $TopicImpl>
        get copyWith =>
2648   __\begin{equation}\begin{gathered}TopicImplCopyWithImpl
        <_ $TopicImpl>(this , _ $identity);

2649
2650   @override
2651   Map<String , dynamic> toJson() {
2652       return _\end{gathered}\end{equation}TopicImplToJson(
2653       this ,
2654       );
2655   }
2656 }

2657
2658 abstract class _Topic implements Topic {
2659     const factory _Topic({required final int id , required final
        String name}) =
2660         _ $TopicImpl;
2661
2662     factory _Topic.fromJson(Map<String , dynamic> json) =
        _ $TopicImpl.fromJson;

2663
2664     @override
2665     int get id;
2666     @override
2667     String get name;
2668     @override
2669     @JsonKey(ignore: true)
2670     _\begin{equation}\begin{gathered}TopicImplCopyWith<
        _ $TopicImpl> get copyWith =>
2671         throw _privateConstructorUsedError;
2672 }

2673
2674 conference_request.dart
2675
2676 import 'package:freezed_annotation/freezed_annotation.dart';
2677
2678 part 'conference_request.freezed.dart';
2679 part 'conference_request.g.dart';
2680
2681 @freezed
2682 class ConferenceRequest with _ $ConferenceRequest {

```

```

2683     const factory ConferenceRequest({
2684         required String name,
2685         required int cityId,
2686         required int topicId,
2687         required String startDate,
2688         required String endDate,
2689         required String description,
2690         required String contacts,
2691         required String imageUrl,
2692     }) = _ConferenceRequest;
2693
2694     factory ConferenceRequest.fromJson(Map<String, dynamic>
        json) => _$ConferenceRequestFromJson(json);
2695 }
2696
2697 city.dart
2698
2699 import 'package:freezed_annotation/freezed_annotation.dart';
2700
2701 part 'city.freezed.dart';
2702 part 'city.g.dart';
2703
2704 @freezed
2705 class City with _$City {
2706     const factory City({
2707         required int id,
2708         required String name,
2709     }) = _City;
2710
2711     factory City.fromJson(Map<String, dynamic> json) =>
        _$CityFromJson(json);
2712 }
2713
2714 conference_search_options.freezed.dart
2715 // coverage:ignore-file
2716 // GENERATED CODE – DO NOT MODIFY BY HAND
2717 // ignore_for_file: type=lint
2718 // ignore_for_file: unused_element, deprecated_member_use,
        deprecated_member_use_from_same_package,
        use_function_type_syntax_for_parameters, unnecessary_const
        , avoid_init_to_null,

```

```

invalid_override_different_default_values_named ,
prefer_expression_function_bodies , annotate_overrides ,
invalid_annotation_target , unnecessary_question_mark
2719
2720 part of 'conference_search_options.dart';
2721
2722 //
    *****

2723 // FreezedGenerator
2724 //
    *****

2725
2726 T _$identity<T>(T value) => value;
2727
2728 final _privateConstructorUsedError = UnsupportedError(
2729     'It seems like you constructed your class using 'MyClass.
        _()' '. This constructor is only meant to be used by
        freedzed and you are not supposed to need it nor use it
        .\nPlease check the documentation here for more
        information: https://github.com/rrousselGit/freedzed#
        adding-getters-and-methods-to-our-models ');
2730
2731 ConferenceSearchOptions _$ConferenceSearchOptionsFromJson(
2732     Map<String , dynamic> json) {
2733     return _ConferenceSearchOptions.fromJson(json);
2734 }
2735
2736 /// @nodoc
2737 mixin _$ConferenceSearchOptions {
2738     List<City> get cities => throw _privateConstructorUsedError
        ;
2739     List<Topic> get topics => throw
        _privateConstructorUsedError;
2740
2741     Map<String , dynamic> toJson() => throw
        _privateConstructorUsedError;
2742     @JsonKey(ignore: true)
2743     $ConferenceSearchOptionsCopyWith<ConferenceSearchOptions>
        get copyWith =>

```



```

2744         throw _privateConstructorUsedError;
2745     }
2746
2747     /// @nodoc
2748     abstract class $ConferenceSearchOptionsCopyWith<$Res> {
2749         factory $ConferenceSearchOptionsCopyWith(
2750             ConferenceSearchOptions value,
2751             $Res Function(ConferenceSearchOptions) then) =
2752             _$ConferenceSearchOptionsCopyWithImpl<$Res,
2753                 ConferenceSearchOptions>;
2754         @useResult
2755         $Res call({List<City> cities, List<Topic> topics});
2756     }
2757
2758     /// @nodoc
2759     class _$ConferenceSearchOptionsCopyWithImpl<$Res,
2760         $Val extends ConferenceSearchOptions>
2761         implements $ConferenceSearchOptionsCopyWith<$Res> {
2762         _$ConferenceSearchOptionsCopyWithImpl(this._value, this.
2763             _then);
2764
2765         // ignore: unused_field
2766         final $Val _value;
2767         // ignore: unused_field
2768         final $Res Function($Val) _then;
2769
2770         @pragma('vm:prefer-inline')
2771         @override
2772         $Res call({
2773             Object? cities = null,
2774             Object? topics = null,
2775         }) {
2776             return _then(_value.copyWith(
2777                 cities: null == cities
2778                     ? _value.cities
2779                     : cities // ignore: cast_nullable_to_non_nullable
2780                     as List<City>,
2781                 topics: null == topics
2782                     ? _value.topics
2783                     : topics // ignore: cast_nullable_to_non_nullable
2784                     as List<Topic>,

```

```

2782     ) as $Val);
2783   }
2784 }
2785
2786 /// @nodoc
2787 abstract class _\end{gathered}\end{equation}
2788   ConferenceSearchOptionsImplCopyWith<$Res>
2789   implements $ConferenceSearchOptionsCopyWith<$Res> {
2790     factory _\begin{equation}\begin{gathered}
2791       ConferenceSearchOptionsImplCopyWith(
2792         _$ConferenceSearchOptionsImpl value ,
2793         $Res Function(_$ConferenceSearchOptionsImpl) then)
2794         =
2795         __\end{gathered}\end{equation}
2796         ConferenceSearchOptionsImplCopyWithImpl<$Res>;
2797
2798     @override
2799     @useResult
2800     $Res call({List<City> cities , List<Topic> topics});
2801   }
2802
2803 /// @nodoc
2804 class __\begin{equation}\begin{gathered}
2805   ConferenceSearchOptionsImplCopyWithImpl<$Res>
2806   extends _$ConferenceSearchOptionsCopyWithImpl<$Res ,
2807     _$ConferenceSearchOptionsImpl>
2808   implements _\end{gathered}\end{equation}
2809     ConferenceSearchOptionsImplCopyWith<$Res> {
2810   __\begin{equation}\begin{gathered}
2811     ConferenceSearchOptionsImplCopyWithImpl(
2812       _$ConferenceSearchOptionsImpl _value ,
2813       $Res Function(_$ConferenceSearchOptionsImpl) _then)
2814       : super(_value , _then);
2815
2816   @pragma('vm:prefer-inline ')
2817   @override
2818   $Res call({
2819     Object? cities = null ,
2820     Object? topics = null ,
2821   }) {
2822     return _then(_$ConferenceSearchOptionsImpl(
2823       cities: null == cities

```

```

2816         ? _value._cities
2817         : cities // ignore: cast_nullable_to_non_nullable
2818         as List<City>,
2819     topics: null == topics
2820         ? _value._topics
2821         : topics // ignore: cast_nullable_to_non_nullable
2822         as List<Topic>,
2823     ));
2824 }
2825 }
2826
2827 /// @nodoc
2828 @JsonSerializable()
2829 class _$ConferenceSearchOptionsImpl implements
2830     _ConferenceSearchOptions {
2831     const _$ConferenceSearchOptionsImpl(
2832         {required final List<City> cities, required final List<
2833             Topic> topics})
2834         : _cities = cities,
2835           _topics = topics;
2836
2837     factory _$ConferenceSearchOptionsImpl.fromJson(Map<String,
2838         dynamic> json) =>
2839         _\end{gathered}\end{equation}
2840             ConferenceSearchOptionsImplFromJson(json);
2841
2842     final List<City> _cities;
2843     @override
2844     List<City> get cities {
2845         if (_cities is EqualUnmodifiableListView) return _cities;
2846         // ignore: implicit_dynamic_type
2847         return EqualUnmodifiableListView(_cities);
2848     }
2849
2850     final List<Topic> _topics;
2851     @override
2852     List<Topic> get topics {
2853         if (_topics is EqualUnmodifiableListView) return _topics;
2854         // ignore: implicit_dynamic_type
2855         return EqualUnmodifiableListView(_topics);
2856     }

```

```

2853
2854     @override
2855     String toString() {
2856         return 'ConferenceSearchOptions(cities: $cities, topics:
                $topics)';
2857     }
2858
2859     @override
2860     bool operator ==(Object other) {
2861         return identical(this, other) ||
2862             (other.runtimeType == runtimeType &&
2863                 other is _$ConferenceSearchOptionsImpl &&
2864                 const DeepCollectionEquality().equals(other._cities, _cities) &&
2865                 const DeepCollectionEquality().equals(other._topics, _topics));
2866     }
2867
2868     @JsonKey(ignore: true)
2869     @override
2870     int get hashCode => Object.hash(
2871         runtimeType,
2872         const DeepCollectionEquality().hash(_cities),
2873         const DeepCollectionEquality().hash(_topics));
2874
2875     @JsonKey(ignore: true)
2876     @override
2877     @pragma('vm:prefer-inline')
2878     _\begin{equation}\begin{gathered}
        ConferenceSearchOptionsImplCopyWith<
        _$ConferenceSearchOptionsImpl>
2879         get copyWith => __\end{gathered}\end{equation}
        ConferenceSearchOptionsImplCopyWithImpl<
        _$ConferenceSearchOptionsImpl>(this, _$identity);
2880
2881
2882     @override
2883     Map<String, dynamic> toJson() {
2884         return _\begin{equation}\begin{gathered}
        ConferenceSearchOptionsImplToJson(
2885             this,
2886             );

```

```

2887     }
2888 }
2889
2890 abstract class _ConferenceSearchOptions implements
    ConferenceSearchOptions {
2891     const factory _ConferenceSearchOptions(
2892         {required final List<City> cities ,
2893         required final List<Topic> topics}) =
        _$ConferenceSearchOptionsImpl;
2894
2895     factory _ConferenceSearchOptions.fromJson(Map<String ,
        dynamic> json) =
2896         _$ConferenceSearchOptionsImpl.fromJson;
2897
2898     @override
2899     List<City> get cities;
2900     @override
2901     List<Topic> get topics;
2902     @override
2903     @JsonKey(ignore: true)
2904     _\end{gathered}\end{equation}
        ConferenceSearchOptionsImplCopyWith<
        _$ConferenceSearchOptionsImpl>
2905         get copyWith => throw _privateConstructorUsedError;
2906 }
2907
2908 topic.dart
2909 import 'package:freezed_annotation/freezed_annotation.dart';
2910
2911 part 'topic.freezed.dart';
2912 part 'topic.g.dart';
2913
2914 @freezed
2915 class Topic with _$Topic {
2916     const factory Topic({
2917         required int id ,
2918         required String name ,
2919     }) = _Topic;
2920
2921     factory Topic.fromJson(Map<String , dynamic> json) =>
        _$TopicFromJson(json);

```

```

2922 }
2923
2924 conference_updating_request.g.dart
2925 // GENERATED CODE – DO NOT MODIFY BY HAND
2926
2927 part of 'conference_updating_request.dart';
2928
2929 //
    *****

2930 // JsonSerializerGenerator
2931 //
    *****

2932
2933 _$ConferenceUpdatingRequestImpl _\begin{equation}\begin{
gathered} ConferenceUpdatingRequestImplFromJson(
2934     Map<String , dynamic> json ) =>
2935     _$ConferenceUpdatingRequestImpl(
2936         name: json['name'] as String?,
2937         cityId: (json['cityId'] as num?)?.toInt(),
2938         topicId: (json['topicId'] as num?)?.toInt(),
2939         startDate: json['startDate'] as String?,
2940         endDate: json['endDate'] as String?,
2941         description: json['description'] as String?,
2942         contacts: json['contacts'] as String?,
2943         imageUrl: json['imageUrl'] as String?,
2944     );
2945
2946 Map<String , dynamic> _\end{gathered}\end{equation}
ConferenceUpdatingRequestImplToJson(
2947     _$ConferenceUpdatingRequestImpl instance ) =>
2948     <String , dynamic>{
2949         'name': instance.name,
2950         'cityId': instance.cityId,
2951         'topicId': instance.topicId,
2952         'startDate': instance.startDate,
2953         'endDate': instance.endDate,
2954         'description': instance.description,
2955         'contacts': instance.contacts,
2956         'imageUrl': instance.imageUrl,

```

```

2957     };
2958
2959 conference_short_response.g.dart
2960 // GENERATED CODE – DO NOT MODIFY BY HAND
2961
2962 part of 'conference_short_response.dart';
2963
2964 //
2965     *****
2966
2967 // JsonSerializerGenerator
2968 //
2969     *****
2970
2971 _$ConferenceShortResponseImpl _\begin{equation}\begin{
2972 gathered} ConferenceShortResponseImplFromJson(
2973     Map<String , dynamic> json ) =>
2974     _$ConferenceShortResponseImpl(
2975         id: (json['id'] as num).toInt() ,
2976         name: json['name'] as String ,
2977         city: json['city'] as String ,
2978         topic: json['topic'] as String ,
2979         startDate: json['startDate'] as String ,
2980         endDate: json['endDate'] as String ,
2981     );
2982
2983 Map<String , dynamic> _\end{gathered}\end{equation}
2984 ConferenceShortResponseImplToJson(
2985     _$ConferenceShortResponseImpl instance ) =>
2986     <String , dynamic>{
2987         'id': instance.id ,
2988         'name': instance.name ,
2989         'city': instance.city ,
2990         'topic': instance.topic ,
2991         'startDate': instance.startDate ,
2992         'endDate': instance.endDate ,
2993     };
2994
2995 city.g.dart
2996 // GENERATED CODE – DO NOT MODIFY BY HAND

```

```

2992
2993 part of 'city.dart';
2994
2995 //
    *****

2996 // JsonSerializerGenerator
2997 //
    *****

2998
2999 _$CityImpl _\begin{equation}\begin{gathered}CityImplFromJson(
    Map<String , dynamic> json) => _$CityImpl(
3000     id: (json['id'] as num).toInt(),
3001     name: json['name'] as String ,
3002 );
3003
3004 Map<String , dynamic> _\end{gathered}\end{equation}
    CityImplToJson(_$CityImpl instance) =>
3005     <String , dynamic>{
3006         'id': instance.id ,
3007         'name': instance.name ,
3008     };
3009
3010 conference_detail_response.g.dart
3011 // GENERATED CODE – DO NOT MODIFY BY HAND
3012
3013 part of 'conference_detail_response.dart';
3014
3015 //
    *****

3016 // JsonSerializerGenerator
3017 //
    *****

3018
3019 _$ConferenceDetailResponseImpl _\begin{equation}\begin{
    gathered}ConferenceDetailResponseImplFromJson(
3020     Map<String , dynamic> json) =>
3021     _$ConferenceDetailResponseImpl(

```



```

3022         id: (json['id'] as num).toInt(),
3023         name: json['name'] as String,
3024         city: json['city'] as String,
3025         topic: json['topic'] as String,
3026         startDate: json['startDate'] as String,
3027         endDate: json['endDate'] as String,
3028         description: json['description'] as String,
3029         contacts: json['contacts'] as String,
3030         canRedact: json['canRedact'] as bool,
3031     );
3032
3033 Map<String, dynamic> _\end{gathered}\end{equation}
    ConferenceDetailResponseImplToJson(
3034         _$ConferenceDetailResponseImpl instance) =>
3035     <String, dynamic>{
3036         'id': instance.id,
3037         'name': instance.name,
3038         'city': instance.city,
3039         'topic': instance.topic,
3040         'startDate': instance.startDate,
3041         'endDate': instance.endDate,
3042         'description': instance.description,
3043         'contacts': instance.contacts,
3044         'canRedact': instance.canRedact,
3045     };
3046
3047 conference_request.freezed.dart
3048 // coverage:ignore-file
3049 // GENERATED CODE – DO NOT MODIFY BY HAND
3050 // ignore_for_file: type=lint
3051 // ignore_for_file: unused_element, deprecated_member_use,
    deprecated_member_use_from_same_package,
    use_function_type_syntax_for_parameters, unnecessary_const
    , avoid_init_to_null,
    invalid_override_different_default_values_named,
    prefer_expression_function_bodies, annotate_overrides,
    invalid_annotation_target, unnecessary_question_mark
3052
3053 part of 'conference_request.dart';
3054

```

```

3055 //
    *****

3056 // FreezedGenerator
3057 //
    *****

3058
3059 T _$identity<T>(T value) => value;
3060
3061 final _privateConstructorUsedError = UnsupportedError(
3062     'It seems like you constructed your class using `MyClass.
        _()`. This constructor is only meant to be used by
        freezed and you are not supposed to need it nor use it
        .\nPlease check the documentation here for more
        information: https://github.com/rrousselGit/freezed#
        adding-getters-and-methods-to-our-models`);
3063
3064 ConferenceRequest _$ConferenceRequestFromJson(Map<String ,
        dynamic> json) {
3065     return _ConferenceRequest.fromJson(json);
3066 }
3067
3068 /// @nodoc
3069 mixin _$ConferenceRequest {
3070     String get name => throw _privateConstructorUsedError;
3071     int get cityId => throw _privateConstructorUsedError;
3072     int get topicId => throw _privateConstructorUsedError;
3073     String get startDate => throw _privateConstructorUsedError;
3074     String get endDate => throw _privateConstructorUsedError;
3075     String get description => throw
        _privateConstructorUsedError;
3076     String get contacts => throw _privateConstructorUsedError;
3077     String get imageUrl => throw _privateConstructorUsedError;
3078
3079     Map<String , dynamic> toJson() => throw
        _privateConstructorUsedError;
3080     @JsonKey(ignore: true)
3081     $ConferenceRequestCopyWith<ConferenceRequest> get copyWith
        =>
3082         throw _privateConstructorUsedError;

```

```

3083 }
3084
3085 /// @nodoc
3086 abstract class $ConferenceRequestCopyWith<$Res> {
3087     factory $ConferenceRequestCopyWith(
3088         ConferenceRequest value , $Res Function(
3089             ConferenceRequest) then) =
3090         _$ConferenceRequestCopyWithImpl<$Res , ConferenceRequest
3091             >;
3092     @useResult
3093     $Res call(
3094         {String name ,
3095         int cityId ,
3096         int topicId ,
3097         String startDate ,
3098         String endDate ,
3099         String description ,
3100         String contacts ,
3101         String imageUrl});
3102 }
3103
3104 /// @nodoc
3105 class _$ConferenceRequestCopyWithImpl<$Res , $Val extends
3106     ConferenceRequest>
3107     implements $ConferenceRequestCopyWith<$Res> {
3108     _$ConferenceRequestCopyWithImpl(this._value , this._then);
3109
3110     // ignore: unused_field
3111     final $Val _value;
3112     // ignore: unused_field
3113     final $Res Function($Val) _then;
3114
3115     @pragma( 'vm:prefer-inline ' )
3116     @override
3117     $Res call({
3118         Object? name = null ,
3119         Object? cityId = null ,
3120         Object? topicId = null ,
3121         Object? startDate = null ,
3122         Object? endDate = null ,
3123         Object? description = null ,

```

```

3121     Object? contacts = null ,
3122     Object? imageUrl = null ,
3123 )) {
3124     return _then(_value.copyWith(
3125         name: null == name
3126             ? _value.name
3127             : name // ignore: cast_nullable_to_non_nullable
3128             as String ,
3129         cityId: null == cityId
3130             ? _value.cityId
3131             : cityId // ignore: cast_nullable_to_non_nullable
3132             as int ,
3133         topicId: null == topicId
3134             ? _value.topicId
3135             : topicId // ignore: cast_nullable_to_non_nullable
3136             as int ,
3137         startDate: null == startDate
3138             ? _value.startDate
3139             : startDate // ignore:
3140                 cast_nullable_to_non_nullable
3141                 as String ,
3141         endDate: null == endDate
3142             ? _value.endDate
3143             : endDate // ignore: cast_nullable_to_non_nullable
3144             as String ,
3145         description: null == description
3146             ? _value.description
3147             : description // ignore:
3148                 cast_nullable_to_non_nullable
3149                 as String ,
3149         contacts: null == contacts
3150             ? _value.contacts
3151             : contacts // ignore: cast_nullable_to_non_nullable
3152             as String ,
3153         imageUrl: null == imageUrl
3154             ? _value.imageUrl
3155             : imageUrl // ignore: cast_nullable_to_non_nullable
3156             as String ,
3157     ) as $Val);
3158 }
3159 }

```

```

3160
3161 /// @nodoc
3162 abstract class _\begin{equation}\begin{gathered}
    ConferenceRequestImplCopyWith<$Res>
3163     implements $ConferenceRequestCopyWith<$Res> {
3164     factory _\end{gathered}\end{equation}
        ConferenceRequestImplCopyWith(_$ConferenceRequestImpl
            value ,
3165             $Res Function(_$ConferenceRequestImpl) then) =
3166         __\begin{equation}\begin{gathered}
            ConferenceRequestImplCopyWithImpl<$Res>;
3167     @override
3168     @useResult
3169     $Res call(
3170         {String name,
3171         int cityId ,
3172         int topicId ,
3173         String startDate ,
3174         String endDate ,
3175         String description ,
3176         String contacts ,
3177         String imageUrl});
3178 }
3179
3180 /// @nodoc
3181 class __\end{gathered}\end{equation}
    ConferenceRequestImplCopyWithImpl<$Res>
3182     extends _$ConferenceRequestCopyWithImpl<$Res ,
        _$ConferenceRequestImpl>
3183     implements _\begin{equation}\begin{gathered}
        ConferenceRequestImplCopyWith<$Res> {
3184     __\end{gathered}\end{equation}
        ConferenceRequestImplCopyWithImpl(
            _$ConferenceRequestImpl _value ,
3185             $Res Function(_$ConferenceRequestImpl) _then)
3186             : super(_value , _then);
3187
3188     @pragma('vm:prefer-inline ')
3189     @override
3190     $Res call({
3191         Object? name = null ,

```

```

3192     Object? cityId = null ,
3193     Object? topicId = null ,
3194     Object? startDate = null ,
3195     Object? endDate = null ,
3196     Object? description = null ,
3197     Object? contacts = null ,
3198     Object? imageUrl = null ,
3199 }) {
3200     return _then(_$ConferenceRequestImpl(
3201         name: null == name
3202             ? _value.name
3203             : name // ignore: cast_nullable_to_non_nullable
3204             as String ,
3205         cityId: null == cityId
3206             ? _value.cityId
3207             : cityId // ignore: cast_nullable_to_non_nullable
3208             as int ,
3209         topicId: null == topicId
3210             ? _value.topicId
3211             : topicId // ignore: cast_nullable_to_non_nullable
3212             as int ,
3213         startDate: null == startDate
3214             ? _value.startDate
3215             : startDate // ignore:
3216                 cast_nullable_to_non_nullable
3217                 as String ,
3218         endDate: null == endDate
3219             ? _value.endDate
3220             : endDate // ignore: cast_nullable_to_non_nullable
3221             as String ,
3222         description: null == description
3223             ? _value.description
3224             : description // ignore:
3225                 cast_nullable_to_non_nullable
3226                 as String ,
3227         contacts: null == contacts
3228             ? _value.contacts
3229             : contacts // ignore: cast_nullable_to_non_nullable
3230             as String ,
3231         imageUrl: null == imageUrl
3232             ? _value.imageUrl

```

```

3231         : imageUrl // ignore: cast_nullable_to_non_nullable
3232         as String ,
3233     ));
3234 }
3235 }
3236
3237 /// @nodoc
3238 @JsonSerializable()
3239 class _$ConferenceRequestImpl implements _ConferenceRequest {
3240     const _$ConferenceRequestImpl(
3241         {required this.name,
3242         required this.cityId ,
3243         required this.topicId ,
3244         required this.startDate ,
3245         required this.endDate ,
3246         required this.description ,
3247         required this.contacts ,
3248         required this.imageUrl});
3249
3250     factory _$ConferenceRequestImpl.fromJson(Map<String ,
3251         dynamic> json) =>
3252         _\begin{equation}\begin{gathered}
3253             ConferenceRequestImplFromJson(json);
3254
3255     @override
3256     final String name;
3257     @override
3258     final int cityId;
3259     @override
3260     final int topicId;
3261     @override
3262     final String startDate;
3263     @override
3264     final String endDate;
3265     @override
3266     final String description;
3267     @override
3268     final String contacts;
3269     @override
3270     final String imageUrl;

```

```

3270 @override
3271 String toString() {
3272     return 'ConferenceRequest(name: $name, cityId: $cityId,
        topicId: $topicId, startDate: $startDate, endDate:
        $endDate, description: $description, contacts:
        $contacts, imageUrl: $imageUrl)';
3273 }
3274
3275 @override
3276 bool operator ==(Object other) {
3277     return identical(this, other) ||
3278         (other.runtimeType == runtimeType &&
3279             other is _$ConferenceRequestImpl &&
3280             (identical(other.name, name) || other.name ==
                name) &&
3281             (identical(other.cityId, cityId) || other.cityId
                == cityId) &&
3282             (identical(other.topicId, topicId) || other.
                topicId == topicId) &&
3283             (identical(other.startDate, startDate) ||
                other.startDate == startDate) &&
3284             (identical(other.endDate, endDate) || other.
                endDate == endDate) &&
3285             (identical(other.description, description) ||
                other.description == description) &&
3286             (identical(other.contacts, contacts) ||
                other.contacts == contacts) &&
3287             (identical(other.imageUrl, imageUrl) ||
                other.imageUrl == imageUrl));
3288 }
3289
3290 @JsonKey(ignore: true)
3291 @override
3292 int get hashCode => Object.hash(runtimeType, name, cityId,
        topicId, startDate,
3293     endDate, description, contacts, imageUrl);
3294
3295 @JsonKey(ignore: true)
3296 @override
3297 @pragma('vm:prefer-inline')

```



```

3302 _\end{gathered}\end{equation}ConferenceRequestImplCopyWith<
    _$ConferenceRequestImpl> get copyWith =>
3303 __\begin{equation}\begin{gathered}
    ConferenceRequestImplCopyWithImpl<
    _$ConferenceRequestImpl>(  

3304     this , _$identity);
3305
3306 @override
3307 Map<String , dynamic> toJson() {
3308     return _\end{gathered}\end{equation}
    ConferenceRequestImplToJson(  

3309     this ,
3310 );
3311 }
3312 }
3313
3314 abstract class _ConferenceRequest implements
    ConferenceRequest {
3315     const factory _ConferenceRequest(  

3316         {required final String name,  

3317         required final int cityId ,  

3318         required final int topicId ,  

3319         required final String startDate ,  

3320         required final String endDate ,  

3321         required final String description ,  

3322         required final String contacts ,  

3323         required final String imageUrl}) =
        _$ConferenceRequestImpl;
3324
3325     factory _ConferenceRequest.fromJson(Map<String , dynamic>
        json) =
3326         _$ConferenceRequestImpl.fromJson;
3327
3328 @override
3329 String get name;
3330 @override
3331 int get cityId;
3332 @override
3333 int get topicId;
3334 @override
3335 String get startDate;

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```

3336     @override
3337     String get endDate;
3338     @override
3339     String get description;
3340     @override
3341     String get contacts;
3342     @override
3343     String get imageUrl;
3344     @override
3345     @JsonKey(ignore: true)
3346     _\begin{equation}\begin{gathered}
        ConferenceRequestImplCopyWith<_ConferenceRequestImpl>
        get copyWith =>
3347         throw _privateConstructorUsedError;
3348     }
3349
3350 conference_search_options.dart
3351 import 'package:freezed_annotation/freezed_annotation.dart';
3352
3353 import 'city.dart';
3354 import 'topic.dart';
3355
3356 part 'conference_search_options.freezed.dart';
3357 part 'conference_search_options.g.dart';
3358
3359 @freezed
3360 class ConferenceSearchOptions with _ConferenceSearchOptions
    {
3361     const factory ConferenceSearchOptions({
3362         required List<City> cities,
3363         required List<Topic> topics,
3364     }) = _ConferenceSearchOptions;
3365
3366     factory ConferenceSearchOptions.fromJson(Map<String,
        dynamic> json) =>
3367         _ConferenceSearchOptionsFromJson(json);
3368     }
3369
3370 city.freezed.dart
3371 // coverage: ignore - file
3372 // GENERATED CODE - DO NOT MODIFY BY HAND

```

```

3373 // ignore_for_file: type=lint
3374 // ignore_for_file: unused_element, deprecated_member_use,
    deprecated_member_use_from_same_package,
    use_function_type_syntax_for_parameters, unnecessary_const
    , avoid_init_to_null,
    invalid_override_different_default_values_named,
    prefer_expression_function_bodies, annotate_overrides,
    invalid_annotation_target, unnecessary_question_mark
3375
3376 part of 'city.dart';
3377
3378 //
    *****
3379 // FreezedGenerator
3380 //
    *****
3381
3382 T _$identity<T>(T value) => value;
3383
3384 final _privateConstructorUsedError = UnsupportedError(
3385     'It seems like you constructed your class using `MyClass.`
    _()`. This constructor is only meant to be used by
    frozen and you are not supposed to need it nor use it
    .\nPlease check the documentation here for more
    information: https://github.com/rrousselGit/frozen#
    adding-getters-and-methods-to-our-models`);
3386
3387 City _$CityFromJson(Map<String, dynamic> json) {
3388     return _City.fromJson(json);
3389 }
3390
3391 /// @nodoc
3392 mixin _$City {
3393     int get id => throw _privateConstructorUsedError;
3394     String get name => throw _privateConstructorUsedError;
3395
3396     Map<String, dynamic> toJson() => throw
        _privateConstructorUsedError;
3397     @JsonKey(ignore: true)

```

```

3398     $CityCopyWith<City> get copyWith => throw
        _privateConstructorUsedError;
3399 }
3400
3401 /// @nodoc
3402 abstract class $CityCopyWith<$Res> {
3403     factory $CityCopyWith(City value, $Res Function(City) then)
        =
3404         _$CityCopyWithImpl<$Res, City>;
3405     @useResult
3406     $Res call({int id, String name});
3407 }
3408
3409 /// @nodoc
3410 class _$CityCopyWithImpl<$Res, $Val extends City>
3411     implements $CityCopyWith<$Res> {
3412     _$CityCopyWithImpl(this._value, this._then);
3413
3414     // ignore: unused_field
3415     final $Val _value;
3416     // ignore: unused_field
3417     final $Res Function($Val) _then;
3418
3419     @pragma('vm:prefer-inline')
3420     @override
3421     $Res call({
3422         Object? id = null,
3423         Object? name = null,
3424     }) {
3425         return _then(_value.copyWith(
3426             id: null == id
3427                 ? _value.id
3428                 : id // ignore: cast_nullable_to_non_nullable
3429                     as int,
3430             name: null == name
3431                 ? _value.name
3432                 : name // ignore: cast_nullable_to_non_nullable
3433                     as String,
3434         ) as $Val);
3435     }
3436 }

```

```

3437
3438 /// @nodoc
3439 abstract class _\end{gathered}\end{equation}CityImplCopyWith<
    $Res> implements $CityCopyWith<$Res> {
3440     factory _\begin{equation}\begin{gathered}CityImplCopyWith(
3441         _$CityImpl value, $Res Function(_$CityImpl) then) =
3442         __\end{gathered}\end{equation}CityImplCopyWithImpl<$Res
            >;
3443     @override
3444     @useResult
3445     $Res call({int id, String name});
3446 }
3447
3448 /// @nodoc
3449 class __\begin{equation}\begin{gathered}CityImplCopyWithImpl<
    $Res>
3450     extends _$CityCopyWithImpl<$Res, _$CityImpl>
3451     implements _\end{gathered}\end{equation}CityImplCopyWith<
        $Res> {
3452     __\begin{equation}\begin{gathered}CityImplCopyWithImpl(
        _$CityImpl _value, $Res Function(_$CityImpl) _then)
3453         : super(_value, _then);
3454
3455     @pragma('vm:prefer-inline')
3456     @override
3457     $Res call({
3458         Object? id = null,
3459         Object? name = null,
3460     }) {
3461         return _then(_$CityImpl(
3462             id: null == id
3463                 ? _value.id
3464                 : id // ignore: cast_nullable_to_non_nullable
3465                 as int,
3466             name: null == name
3467                 ? _value.name
3468                 : name // ignore: cast_nullable_to_non_nullable
3469                 as String,
3470         ));
3471     }
3472 }

```

```

3473
3474 /// @nodoc
3475 @JsonSerializable()
3476 class _$CityImpl implements _City {
3477     const _$CityImpl({required this.id, required this.name});
3478
3479     factory _$CityImpl.fromJson(Map<String, dynamic> json) =>
3480         _\end{gathered}\end{equation}CityImplFromJson(json);
3481
3482     @override
3483     final int id;
3484     @override
3485     final String name;
3486
3487     @override
3488     String toString() {
3489         return 'City(id: $id, name: $name)';
3490     }
3491
3492     @override
3493     bool operator ==(Object other) {
3494         return identical(this, other) ||
3495             (other.runtimeType == runtimeType &&
3496                 other is _$CityImpl &&
3497                 (identical(other.id, id) || other.id == id) &&
3498                 (identical(other.name, name) || other.name ==
3499                     name));
3500     }
3501
3502     @JsonKey(ignore: true)
3503     @override
3504     int get hashCode => Object.hash(runtimeType, id, name);
3505
3506     @JsonKey(ignore: true)
3507     @override
3508     @pragma('vm:prefer-inline')
3509     _\begin{equation}\begin{gathered}CityImplCopyWith<
3510         _$CityImpl> get copyWith =>
3511         __\end{gathered}\end{equation}CityImplCopyWithImpl<
3512         _$CityImpl>(this, _$identity);

```

```

3511     @override
3512     Map<String , dynamic> toJson() {
3513         return _\begin{equation}\begin{gathered}CityImplToJson(
3514             this ,
3515         );
3516     }
3517 }
3518
3519 abstract class _City implements City {
3520     const factory _City({required final int id, required final
3521         String name}) =
3522         _$CityImpl;
3523
3524     factory _City.fromJson(Map<String , dynamic> json) =
3525         _$CityImpl.fromJson;
3526
3527     @override
3528     int get id;
3529     @override
3530     String get name;
3531     @override
3532     @JsonKey(ignore: true)
3533     _\end{gathered}\end{equation}CityImplCopyWith<_CityImpl>
3534         get copyWith =>
3535         throw _privateConstructorUsedError;
3536 }
3537
3538 conference_request.g.dart
3539 // GENERATED CODE – DO NOT MODIFY BY HAND
3540
3541 part of 'conference_request.dart';
3542
3543 //
3544
3545 // JsonSerializerGenerator
3546 //
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```

3544 _$ConferenceRequestImpl _\begin{equation}\begin{gathered}
      ConferenceRequestImplFromJson(
3545         Map<String , dynamic> json) =>
3546     _$ConferenceRequestImpl(
3547         name: json['name'] as String ,
3548         cityId: (json['cityId'] as num).toInt() ,
3549         topicId: (json['topicId'] as num).toInt() ,
3550         startDate: json['startDate'] as String ,
3551         endDate: json['endDate'] as String ,
3552         description: json['description'] as String ,
3553         contacts: json['contacts'] as String ,
3554         imageUrl: json['imageUrl'] as String ,
3555     );
3556
3557 Map<String , dynamic> _\end{gathered}\end{equation}
      ConferenceRequestImplToJson(
3558         _$ConferenceRequestImpl instance) =>
3559     <String , dynamic>{
3560         'name': instance.name ,
3561         'cityId': instance.cityId ,
3562         'topicId': instance.topicId ,
3563         'startDate': instance.startDate ,
3564         'endDate': instance.endDate ,
3565         'description': instance.description ,
3566         'contacts': instance.contacts ,
3567         'imageUrl': instance.imageUrl ,
3568     };
3569
3570 conference_detail_response.freezed.dart
3571 // coverage:ignore-file
3572 // GENERATED CODE – DO NOT MODIFY BY HAND
3573 // ignore_for_file: type=lint
3574 // ignore_for_file: unused_element, deprecated_member_use ,
      deprecated_member_use_from_same_package ,
      use_function_type_syntax_for_parameters , unnecessary_const
      , avoid_init_to_null ,
      invalid_override_different_default_values_named ,
      prefer_expression_function_bodies , annotate_overrides ,
      invalid_annotation_target , unnecessary_question_mark
3575
3576 part of 'conference_detail_response.dart';

```



```

3577
3578 //
    *****

3579 // FreezedGenerator
3580 //
    *****

3581
3582 T _$identity<T>(T value) => value;
3583
3584 final _privateConstructorUsedError = UnsupportedError(
3585     'It seems like you constructed your class using `MyClass.
        _()`. This constructor is only meant to be used by
        freezed and you are not supposed to need it nor use it
        .\nPlease check the documentation here for more
        information: https://github.com/rrousselGit/freezed#
        adding-getters-and-methods-to-our-models`);
3586
3587 ConferenceDetailResponse _$ConferenceDetailResponseFromJson(
3588     Map<String, dynamic> json) {
3589     return _ConferenceDetailResponse.fromJson(json);
3590 }
3591
3592 /// @nodoc
3593 mixin _$ConferenceDetailResponse {
3594     int get id => throw _privateConstructorUsedError;
3595     String get name => throw _privateConstructorUsedError;
3596     String get city => throw _privateConstructorUsedError;
3597     String get topic => throw _privateConstructorUsedError;
3598     String get startDate => throw _privateConstructorUsedError;
3599     String get endDate => throw _privateConstructorUsedError;
3600     String get description => throw
        _privateConstructorUsedError;
3601     String get contacts => throw _privateConstructorUsedError;
3602     bool get canRedact => throw _privateConstructorUsedError;
3603
3604     Map<String, dynamic> toJson() => throw
        _privateConstructorUsedError;
3605     @JsonKey(ignore: true)

```

```

3606     $ConferenceDetailResponseCopyWith<ConferenceDetailResponse>
          get copyWith =>
3607         throw _privateConstructorUsedError;
3608     }
3609
3610     /// @nodoc
3611     abstract class $ConferenceDetailResponseCopyWith<$Res> {
3612         factory $ConferenceDetailResponseCopyWith(
            ConferenceDetailResponse value ,
3613             $Res Function(ConferenceDetailResponse) then) =
3614             _$ConferenceDetailResponseCopyWithImpl<$Res ,
                ConferenceDetailResponse >;
3615         @useResult
3616         $Res call(
3617             {int id ,
3618                 String name ,
3619                 String city ,
3620                 String topic ,
3621                 String startDate ,
3622                 String endDate ,
3623                 String description ,
3624                 String contacts ,
3625                 bool canRedact});
3626     }
3627
3628     /// @nodoc
3629     class _$ConferenceDetailResponseCopyWithImpl<$Res ,
3630         $Val extends ConferenceDetailResponse>
3631         implements $ConferenceDetailResponseCopyWith<$Res> {
3632         _$ConferenceDetailResponseCopyWithImpl(this._value , this .
            _then);
3633
3634         // ignore: unused_field
3635         final $Val _value;
3636         // ignore: unused_field
3637         final $Res Function($Val) _then;
3638
3639         @pragma('vm:prefer-inline ')
3640         @override
3641         $Res call({
3642             Object? id = null ,

```

```

3643     Object? name = null ,
3644     Object? city = null ,
3645     Object? topic = null ,
3646     Object? startDate = null ,
3647     Object? endDate = null ,
3648     Object? description = null ,
3649     Object? contacts = null ,
3650     Object? canRedact = null ,
3651   }) {
3652     return _then(_value.copyWith(
3653       id: null == id
3654         ? _value.id
3655         : id // ignore: cast_nullable_to_non_nullable
3656         as int ,
3657       name: null == name
3658         ? _value.name
3659         : name // ignore: cast_nullable_to_non_nullable
3660         as String ,
3661       city: null == city
3662         ? _value.city
3663         : city // ignore: cast_nullable_to_non_nullable
3664         as String ,
3665       topic: null == topic
3666         ? _value.topic
3667         : topic // ignore: cast_nullable_to_non_nullable
3668         as String ,
3669       startDate: null == startDate
3670         ? _value.startDate
3671         : startDate // ignore:
3672           cast_nullable_to_non_nullable
3673           as String ,
3673       endDate: null == endDate
3674         ? _value.endDate
3675         : endDate // ignore: cast_nullable_to_non_nullable
3676         as String ,
3677       description: null == description
3678         ? _value.description
3679         : description // ignore:
3680           cast_nullable_to_non_nullable
3681           as String ,
3681       contacts: null == contacts

```

```

3682         ? _value.contacts
3683         : contacts // ignore: cast_nullable_to_non_nullable
3684         as String ,
3685     canRedact: null == canRedact
3686     ? _value.canRedact
3687     : canRedact // ignore:
3688         cast_nullable_to_non_nullable
3689         as bool ,
3690     ) as $Val);
3691 }
3692
3693 /// @nodoc
3694 abstract class _\begin{equation}\begin{gathered}
3695     ConferenceDetailResponseImplCopyWith<$Res>
3696     implements $ConferenceDetailResponseCopyWith<$Res> {
3697     factory _\end{gathered}\end{equation}
3698         ConferenceDetailResponseImplCopyWith(
3699             _$ConferenceDetailResponseImpl value ,
3700             $Res Function(_$ConferenceDetailResponseImpl) then)
3701             =
3702             __\begin{equation}\begin{gathered}
3703                 ConferenceDetailResponseImplCopyWithImpl<$Res>;
3704
3705             @override
3706             @useResult
3707             $Res call(
3708                 {int id ,
3709                 String name ,
3710                 String city ,
3711                 String topic ,
3712                 String startDate ,
3713                 String endDate ,
3714                 String description ,
3715                 String contacts ,
3716                 bool canRedact});
3717 }
3718
3719 /// @nodoc
3720 class __\end{gathered}\end{equation}
3721     ConferenceDetailResponseImplCopyWithImpl<$Res>
3722     extends _$ConferenceDetailResponseCopyWithImpl<$Res ,

```

```

3717         _$ConferenceDetailResponseImpl>
3718         implements _\begin{equation}\begin{gathered}
3719         ConferenceDetailResponseImplCopyWith<$Res> {
3720         __\end{gathered}\end{equation}
3721         ConferenceDetailResponseImplCopyWithImpl(
3722         _$ConferenceDetailResponseImpl _value ,
3723         $Res Function(_$ConferenceDetailResponseImpl) _then)
3724         : super(_value , _then);
3725
3726 @pragma('vm:prefer-inline ')
3727 @override
3728 $Res call({
3729     Object? id = null ,
3730     Object? name = null ,
3731     Object? city = null ,
3732     Object? topic = null ,
3733     Object? startDate = null ,
3734     Object? endDate = null ,
3735     Object? description = null ,
3736     Object? contacts = null ,
3737     Object? canRedact = null ,
3738 }) {
3739     return _then(_$ConferenceDetailResponseImpl(
3740         id: null == id
3741             ? _value.id
3742             : id // ignore: cast_nullable_to_non_nullable
3743             as int ,
3744         name: null == name
3745             ? _value.name
3746             : name // ignore: cast_nullable_to_non_nullable
3747             as String ,
3748         city: null == city
3749             ? _value.city
3750             : city // ignore: cast_nullable_to_non_nullable
3751             as String ,
3752         topic: null == topic
3753             ? _value.topic
3754             : topic // ignore: cast_nullable_to_non_nullable
3755             as String ,
3756         startDate: null == startDate
3757             ? _value.startDate

```

```

3756         : startDate // ignore:
              cast_nullable_to_non_nullable
3757         as String ,
3758     endDate: null == endDate
3759         ? _value.endDate
3760         : endDate // ignore: cast_nullable_to_non_nullable
3761         as String ,
3762     description: null == description
3763         ? _value.description
3764         : description // ignore:
              cast_nullable_to_non_nullable
3765         as String ,
3766     contacts: null == contacts
3767         ? _value.contacts
3768         : contacts // ignore: cast_nullable_to_non_nullable
3769         as String ,
3770     canRedact: null == canRedact
3771         ? _value.canRedact
3772         : canRedact // ignore:
              cast_nullable_to_non_nullable
3773         as bool ,
3774     ));
3775 }
3776 }
3777
3778 /// @nodoc
3779 @JsonSerializable()
3780 class _$ConferenceDetailResponseImpl implements
    _ConferenceDetailResponse {
3781     const _$ConferenceDetailResponseImpl(
3782         {required this.id ,
3783         required this.name ,
3784         required this.city ,
3785         required this.topic ,
3786         required this.startDate ,
3787         required this.endDate ,
3788         required this.description ,
3789         required this.contacts ,
3790         required this.canRedact});
3791

```

```

3792     factory _$ConferenceDetailResponseImpl.fromJson(Map<String ,
        dynamic> json) =>
3793         _\begin{equation}\begin{gathered}
            ConferenceDetailResponseImplFromJson(json);
3794
3795     @override
3796     final int id;
3797     @override
3798     final String name;
3799     @override
3800     final String city;
3801     @override
3802     final String topic;
3803     @override
3804     final String startDate;
3805     @override
3806     final String endDate;
3807     @override
3808     final String description;
3809     @override
3810     final String contacts;
3811     @override
3812     final bool canRedact;
3813
3814     @override
3815     String toString() {
3816         return 'ConferenceDetailResponse(id: $id, name: $name,
            city: $city, topic: $topic, startDate: $startDate,
            endDate: $endDate, description: $description, contacts
            : $contacts, canRedact: $canRedact)';
3817     }
3818
3819     @override
3820     bool operator ==(Object other) {
3821         return identical(this, other) ||
3822             (other.runtimeType == runtimeType &&
3823                 other is _$ConferenceDetailResponseImpl &&
3824                 (identical(other.id, id) || other.id == id) &&
3825                 (identical(other.name, name) || other.name ==
                    name) &&

```

```

3826         (identical(other.city , city) || other.city ==
3827             city) &&
3828         (identical(other.topic , topic) || other.topic ==
3829             topic) &&
3830         (identical(other.startDate , startDate) ||
3831             other.startDate == startDate) &&
3832         (identical(other.endDate , endDate) || other.
3833             endDate == endDate) &&
3834         (identical(other.description , description) ||
3835             other.description == description) &&
3836         (identical(other.contacts , contacts) ||
3837             other.contacts == contacts) &&
3838         (identical(other.canRedact , canRedact) ||
3839             other.canRedact == canRedact));
3840     }
3841     @JsonKey(ignore: true)
3842     @override
3843     int get hashCode => Object.hash(runtimeType , id , name , city
3844         , topic , startDate ,
3845         endDate , description , contacts , canRedact);
3846
3847     @JsonKey(ignore: true)
3848     @override
3849     @pragma('vm:prefer-inline ')
3850     _\end{gathered}\end{equation}
3851     ConferenceDetailResponseImplCopyWith<
3852         _$ConferenceDetailResponseImpl>
3853     get copyWith => __\begin{equation}\begin{gathered}
3854         ConferenceDetailResponseImplCopyWithImpl<
3855             _$ConferenceDetailResponseImpl>(this , _$identity);
3856
3857     @override
3858     Map<String , dynamic> toJson() {
3859         return _\end{gathered}\end{equation}
3860             ConferenceDetailResponseImplToJson(
3861                 this ,
3862             );
3863     }
3864 }
3865 }

```



```

3859 abstract class _ConferenceDetailResponse implements
      ConferenceDetailResponse {
3860   const factory _ConferenceDetailResponse(
3861     {required final int id,
3862     required final String name,
3863     required final String city,
3864     required final String topic,
3865     required final String startDate,
3866     required final String endDate,
3867     required final String description,
3868     required final String contacts,
3869     required final bool canRedact}) =
        _$ConferenceDetailResponseImpl;

3870
3871   factory _ConferenceDetailResponse.fromJson(Map<String,
        dynamic> json) =
3872     _$ConferenceDetailResponseImpl.fromJson;
3873
3874   @override
3875   int get id;
3876   @override
3877   String get name;
3878   @override
3879   String get city;
3880   @override
3881   String get topic;
3882   @override
3883   String get startDate;
3884   @override
3885   String get endDate;
3886   @override
3887   String get description;
3888   @override
3889   String get contacts;
3890   @override
3891   bool get canRedact;
3892   @override
3893   @JsonKey(ignore: true)
3894   _$ConferenceDetailResponseImplCopyWith<
        _$ConferenceDetailResponseImpl>
3895     get copyWith => throw _privateConstructorUsedError;

```

```

3896 }
3897
3898 conference_api.dart
3899 import 'package:dio/dio.dart';
3900
3901 import 'models/conference_detail_response.dart';
3902 import 'models/conference_request.dart';
3903 import 'models/conference_search_options.dart';
3904 import 'models/conference_short_response.dart';
3905 import 'models/conference_updating_request.dart';
3906
3907 class ConferenceApi {
3908   final Dio _dio;
3909
3910   ConferenceApi(this._dio);
3911
3912   Future<ConferenceSearchOptions> getSearchOptions() async {
3913     final response = await _dio.get('/
3914       conferences_search_options');
3915     return ConferenceSearchOptions.fromJson(response.data);
3916   }
3917
3918   Future<List<ConferenceShortResponse>> getConferencesList({
3919     String? name,
3920     int? cityId,
3921     int? topicId,
3922     String? startDate,
3923     String? endDate,
3924     String? description,
3925     String? contacts,
3926     String? imageUrl,
3927   }) async {
3928     final response = await _dio.get('/conferences_list',
3929       queryParameters: {
3930         'name': name,
3931         'cityId': cityId,
3932         'topicId': topicId,
3933         'startDate': startDate,
3934         'endDate': endDate,
3935         'description': description,
3936         'contacts': contacts,

```

```

3935         'imageUrl': imageUrl,
3936     });
3937
3938     return (response.data as List<dynamic>)
3939         .map((item) => ConferenceShortResponse.fromJson(item)
3940             )
3941         .toList();
3942 }
3943
3944 Future<void> createConference(ConferenceRequest request) =>
3945     _dio.post(
3946         '/create_conference',
3947         data: request.toJson(),
3948     );
3949
3950 Future<ConferenceDetailResponse> getConferenceDetails(
3951     int conferenceId) async {
3952     final response = await _dio.get(
3953         '/conference/$conferenceId',
3954     );
3955     return ConferenceDetailResponse.fromJson(response.data);
3956 }
3957
3958 Future<void> updateConference(int conferenceId,
3959     ConferenceUpdatingRequest request) =>
3960     _dio.put(
3961         '/conference/$conferenceId',
3962         data: request.toJson(),
3963     );
3964
3965 Future<void> deleteConference(int conferenceId) => _dio.
3966     post(
3967         '/delete_conference/$conferenceId',
3968     );
3969 }
3970
3971 main.dart
3972 import 'package:conference_app/features/di/app_providers.dart';
3973
3974 import 'package:flutter/material.dart';
3975 import 'package:flutter_riverpod/flutter_riverpod.dart';

```

```

3971
3972 import 'features/auth/ui/auth_screen.dart';
3973
3974 void main() {
3975     runApp(const MyApp());
3976 }
3977
3978 class MyApp extends StatelessWidget {
3979     const MyApp({super.key});
3980
3981     @override
3982     Widget build(BuildContext context) {
3983         return ProviderScope(
3984             child: Consumer(
3985                 builder: (_, ref, __) => MaterialApp(
3986                     title: 'Flutter Demo',
3987                     navigatorKey: ref.watch(AppProviders.navigatorKey),
3988                     theme: ThemeData(
3989                         colorScheme: ColorScheme.fromSeed(seedColor:
3990                             Colors.deepPurple),
3991                         useMaterial3: true,
3992                     ),
3993                     home: const LoginForm(),
3994                 ),
3995             );
3996     }
3997 }

```