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ČVUT V PR**

Event Planner - Copy

Architecture and Database

Documentation of a project for the purpose of the course BIE-SI1.

Authors:



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1. Architecture

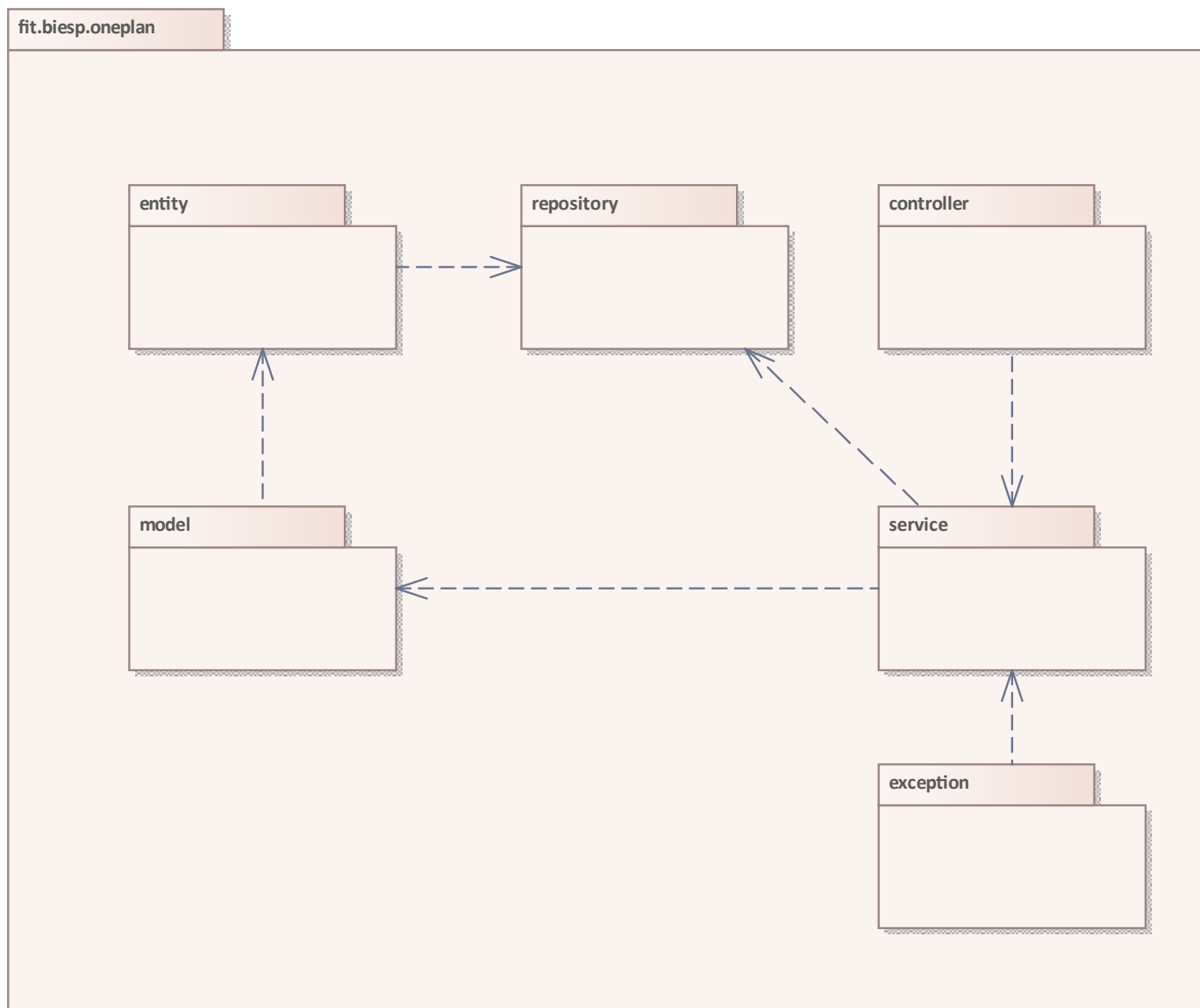


Figure 1 - Architecture

Architecture defines the boundaries between parts of the app and the responsibilities each part should have. There are data classes, entity is used to store information in the database, while DAO classes are used to transfer information between the user and the application. HTTP requests are handled by controller classes. Service classes are used for logic of the data manipulations. Repository interfaces extend CrudRepository and used for connection with a database. Exceptions are handled by exception classes.

1.1 app



Figure 2 - controller

1.3 entity

Entities are used to store information in a database.

Figure 3 - entity

1.4 exception

Used for exceptions that might occur.

Figure 4 - exception

1.5 fit.biesp.oneplan

Figure 5 - fit.biesp.oneplan



Model classes used to transfer information between user and the application

Figure 6 - model

1.7 Package1

1.8 repository

Used for connection with a database.

Figure 7 - repository

1.9 security

Used for secure user log in and registration.

Figure 8 - security

1.10 service

Implementation of app logic and data manipulations.



Figure 9 - service

1.11 web

2. System Architecture

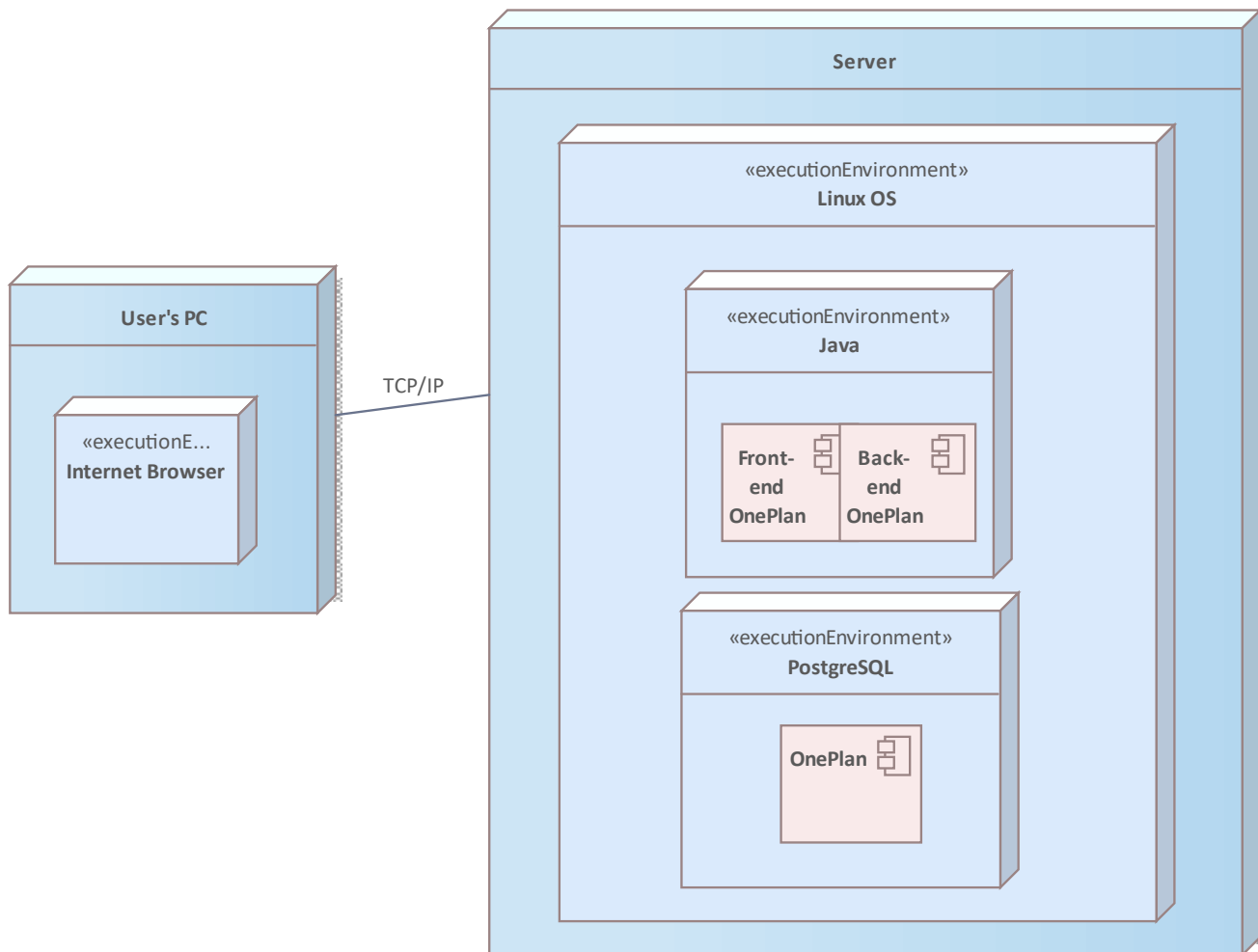


Figure 10 - System Architecture

Conceptual model of system architecture defines the structure and behavior of a system. Server of our app is accessed by an internet browser on user's PC. Server is running Linux OS, which runs our java plus spring framework application and PostgreSQL database.



3. Database Model





Figure 11 - Database Model

A database model determines the logical structure of a database. It shows how data is stored, organized and managed. This is the relational model, which uses a table-based format. Our database consists of seven entities so far. Person entity stores email of a person who is not necessarily registered. User is a registered person and can log in. Friend entity is used by user to add friends to friends list and give friend a nickname. Event contains all the information about the event user organizes. Each event has a location, so location entity is used for this purpose. After event is created invitations are sent to people invited by user. Money transfer shows who should pay, when person has to do it, how much and what for.

3.1 «table» Event

Event entity stores information about event created by user.

Column name	Data type	Not null	Description
person_id	integer	True	
capacity	integer	True	
description	varchar(10000)	True	
price	double precision	True	
date	date	True	
event_id	integer	True	
time	time	True	
location_id	integer	False	

3.2 «table» Friend

Friend entity stores persons from user's friend list and their nicknames.

Column name	Data type	Not null	Description
nickname	varchar(50)	True	
person_email	varchar(50)	True	
person_id	integer	True	

3.3 «table» Invitation

Invitation entity stores information about event and who it was sent to.

Column name	Data type	Not null	Description
event_id	integer	True	
state	boolean	True	
user_id	integer	True	
person_id	integer	True	
invitation_id	integer	True	

3.4 «table» Location

Location entity stores information about a location of an organized event.

Column name	Data type	Not null	Description
address	varchar(50)	True	
coordinates	varchar(50)	False	
event_id	integer	True	



3.5 «table» Money Transfer

Money transfer entity stores information about payments that have to be done for events.

Column name	Data type	Not null	Description
event_id	integer	True	
amount	double precision	True	
date	date	True	
person_id	integer	True	
transfer_id	integer	True	

3.6 «table» Person

Person entity stores email of not registered people.

Column name	Data type	Not null	Description
person_id	integer	True	
person_email	varchar(50)	True	

3.7 «table» User

User entity stores information about registered user.

Column name	Data type	Not null	Description
username	varchar(50)	True	
password	varchar(50)	True	
person_id	integer	True	
person_email	varchar(50)	True	



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