Datenmodell: Design

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Designentscheidungen

Das Design des Datenmodells deckt sich in unserem Fall größtenteils mit dem Objektmodell, da wir uns für den Weg entschieden *Hibernate* für das Mapping von Objekt- nach Datenmodell einzusetzen.

Eine Grundlegende Entscheidung war mehrere Turniere in einem Schema zu erlauben. Damit war es uns möglich beliebig viele Turniere zu generieren und auf einem umfangreicheren Testdatensatz zu operieren.

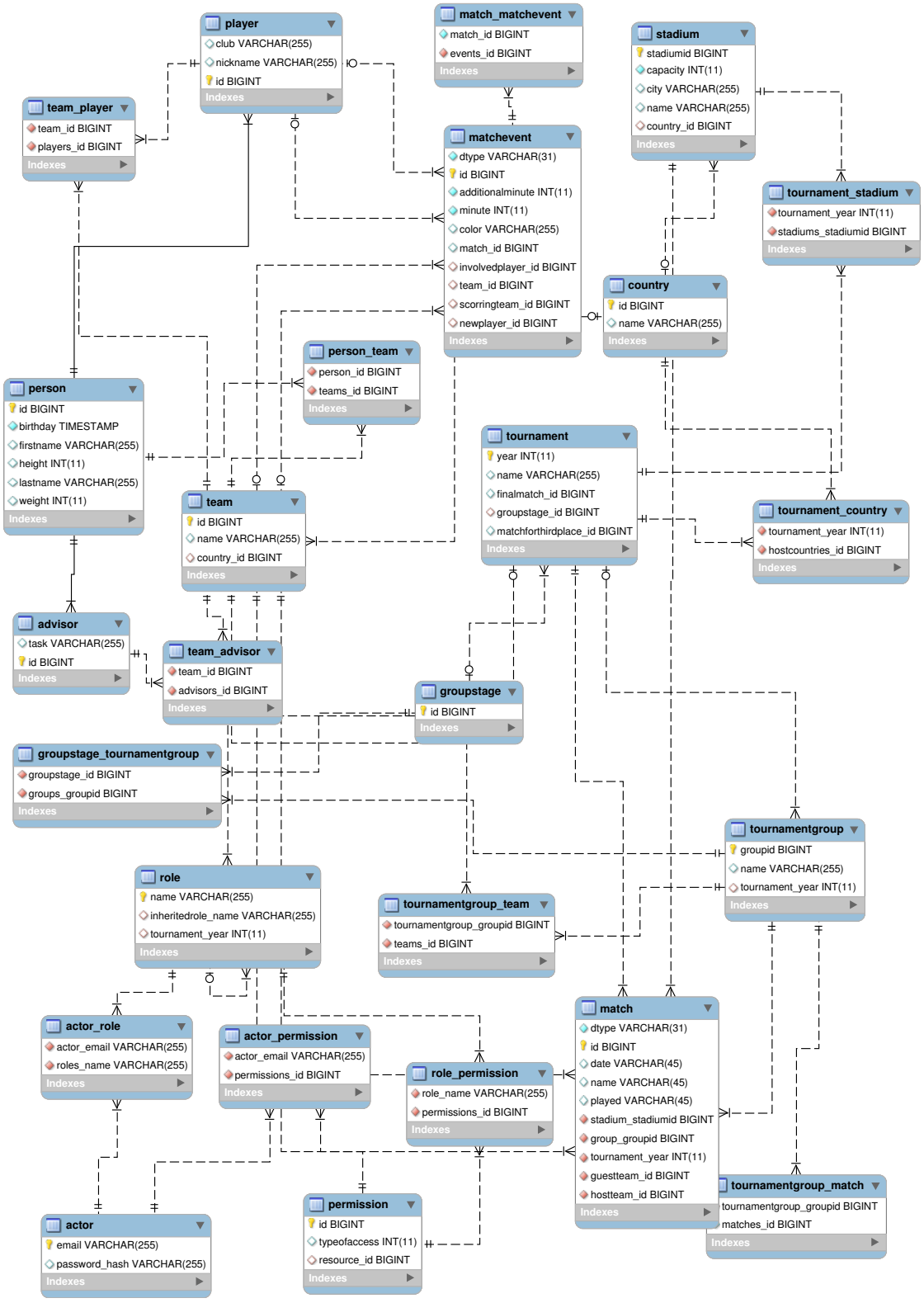
OR-Mapper Vorgehensweise

Wir haben uns entschieden mit *Hibernate* zu Arbeiten. Dabei wurde ausgehend von einem Java-Objektmodell ein relationales Modell erstellt. In unserem Build-Prozess (mittels *Maven*) wird das Schema jedesmal regeneriert und in die Datenbank exportiert. Ein Snapshot der Datenbank inklusive *Stored Procedure* zur Turniererstellung folgt unten.

Alle Testdaten werden von unserer GUI-Anwendung automatisch generiert und in der Datenbank persistiert. Die Turniererstellung aus dem Programm heraus ist sowohl über die *Stored Procedure* als über Java-Methoden möglich.

relationales Schema

Grafisches Model



SQL (Postgres)

```
--
-- PostgreSQL database dump
--

SET statement_timeout = 0;
SET client_encoding = 'UTF8';
SET standard_conforming_strings = off;
SET check_function_bodies = false;
SET client_min_messages = warning;
SET escape_string_warning = off;

SET search_path = public, pg_catalog;

ALTER TABLE ONLY public.role_permission DROP CONSTRAINT fkf8a569386ac4edcc;
ALTER TABLE ONLY public.role_permission DROP CONSTRAINT fkf8a56938401023a7;
ALTER TABLE ONLY public.stadium DROP CONSTRAINT fkf21d53ddfcf4fc9d;
ALTER TABLE ONLY public.matchevent DROP CONSTRAINT fke491d7f5df1dd7b0;
ALTER TABLE ONLY public.matchevent DROP CONSTRAINT fke491d7f5db6578d7;
ALTER TABLE ONLY public.matchevent DROP CONSTRAINT fke491d7f5c7168977;
ALTER TABLE ONLY public.matchevent DROP CONSTRAINT fke491d7f56a9e6294;
ALTER TABLE ONLY public.matchevent DROP CONSTRAINT fke491d7f560766fd;
ALTER TABLE ONLY public.match_match DROP CONSTRAINT fkd7c3a68b884bbd1;
ALTER TABLE ONLY public.match_match DROP CONSTRAINT fkd7c3a68b1fd58223;
ALTER TABLE ONLY public.team_player DROP CONSTRAINT fkd4e5f703db6578d7;
ALTER TABLE ONLY public.team_player DROP CONSTRAINT fkd4e5f70318f27aa6;
ALTER TABLE ONLY public.actor_permission DROP CONSTRAINT fkcf243699d36f2a65;
ALTER TABLE ONLY public.actor_permission DROP CONSTRAINT fkcf243699401023a7;
ALTER TABLE ONLY public.match_matchevent DROP CONSTRAINT fkbfc93acfdcc26853;
ALTER TABLE ONLY public.match_matchevent DROP CONSTRAINT fkbfc93acf60766fd;
ALTER TABLE ONLY public.tournamentgroup_team DROP CONSTRAINT fkb7678b26d57db48a;
ALTER TABLE ONLY public.tournamentgroup_team DROP CONSTRAINT fkb7678b26cdc8c6de;
ALTER TABLE ONLY public.tournament_stadium DROP CONSTRAINT fkabf317a7db034f8f;
ALTER TABLE ONLY public.tournament_stadium DROP CONSTRAINT fkabf317a774b12939;
ALTER TABLE ONLY public.team_advisor DROP CONSTRAINT fka1d587deea5528a;
ALTER TABLE ONLY public.team_advisor DROP CONSTRAINT fka1d587dedb6578d7;
ALTER TABLE ONLY public.player DROP CONSTRAINT fk8ea387019b9d8d6d;
ALTER TABLE ONLY public.tournamentgroup DROP CONSTRAINT fk6372df674b12939;
ALTER TABLE ONLY public.groupstage_tournamentgroup DROP CONSTRAINT fk62cd5967d361fb7;
ALTER TABLE ONLY public.groupstage_tournamentgroup DROP CONSTRAINT fk62cd596526daa28;
ALTER TABLE ONLY public.permission DROP CONSTRAINT fk57f7a1ef94470e9c;
ALTER TABLE ONLY public.tournament_country DROP CONSTRAINT fk5625b3409a553667;
ALTER TABLE ONLY public.tournament_country DROP CONSTRAINT fk5625b34074b12939;
ALTER TABLE ONLY public.person_team DROP CONSTRAINT fk49fd4907ce781a97;
ALTER TABLE ONLY public.person_team DROP CONSTRAINT fk49fd4907cdc8c6de;
ALTER TABLE ONLY public.match DROP CONSTRAINT fk46ae9a5f0ec562f;
ALTER TABLE ONLY public.match DROP CONSTRAINT fk46ae9a5e2487ff;
ALTER TABLE ONLY public.match DROP CONSTRAINT fk46ae9a5d4eaebd3;
ALTER TABLE ONLY public.match DROP CONSTRAINT fk46ae9a574b12939;
ALTER TABLE ONLY public.match DROP CONSTRAINT fk46ae9a515c9d2b6;
ALTER TABLE ONLY public.tournament DROP CONSTRAINT fk3b743609fcd043a4;
ALTER TABLE ONLY public.tournament DROP CONSTRAINT fk3b7436097d361fb7;
ALTER TABLE ONLY public.tournament DROP CONSTRAINT fk3b74360966de6d99;
ALTER TABLE ONLY public.tournamentgroup_match DROP CONSTRAINT fk3525aa1cd57db48a;
ALTER TABLE ONLY public.tournamentgroup_match DROP CONSTRAINT fk3525aa1c2801c0aa;
ALTER TABLE ONLY public.team DROP CONSTRAINT fk27b67dfcf4fc9d;
ALTER TABLE ONLY public.role DROP CONSTRAINT fk26f496da563832;
ALTER TABLE ONLY public.role DROP CONSTRAINT fk26f49674b12939;
ALTER TABLE ONLY public.actor_role DROP CONSTRAINT fk26e2d0c0e4a0b3e5;
ALTER TABLE ONLY public.actor_role DROP CONSTRAINT fk26e2d0c0d36f2a65;
ALTER TABLE ONLY public.advisor DROP CONSTRAINT fk1fc9f7a09b9d8d6d;
ALTER TABLE ONLY public.tournamentgroup_team DROP CONSTRAINT
    tournamentgroup_team_teams_id_key;
ALTER TABLE ONLY public.tournamentgroup DROP CONSTRAINT tournamentgroup_pkey;
ALTER TABLE ONLY public.tournamentgroup_match DROP CONSTRAINT
    tournamentgroup_match_matches_id_key;
ALTER TABLE ONLY public.tournament DROP CONSTRAINT tournament_pkey;
```

```
65 ALTER TABLE ONLY public.team DROP CONSTRAINT team_pkey;
66 ALTER TABLE ONLY public.team_advisor DROP CONSTRAINT team_advisor_advisors_id_key;
67 ALTER TABLE ONLY public.stadium DROP CONSTRAINT stadium_pkey;
68 ALTER TABLE ONLY public."role" DROP CONSTRAINT role_pkey;
69 ALTER TABLE ONLY public.role_permission DROP CONSTRAINT
       role_permission_permissions_id_key;
70 ALTER TABLE ONLY public.resource DROP CONSTRAINT resource_pkey;
71 ALTER TABLE ONLY public.player DROP CONSTRAINT player_pkey;
72 ALTER TABLE ONLY public.person DROP CONSTRAINT person_pkey;
73 ALTER TABLE ONLY public.permission DROP CONSTRAINT permission_pkey;
74 ALTER TABLE ONLY public.matchevent DROP CONSTRAINT matchevent_pkey;
75 ALTER TABLE ONLY public."match" DROP CONSTRAINT match_pkey;
76 ALTER TABLE ONLY public.match_matchevent DROP CONSTRAINT match_matchevent_events_id_key;
77 ALTER TABLE ONLY public.groupstage_tournamentgroup DROP CONSTRAINT
       groupstage_tournamentgroup_groups_groupid_key;
78 ALTER TABLE ONLY public.groupstage DROP CONSTRAINT groupstage_pkey;
79 ALTER TABLE ONLY public.country DROP CONSTRAINT country_pkey;
80 ALTER TABLE ONLY public.advisor DROP CONSTRAINT advisor_pkey;
81 ALTER TABLE ONLY public.actor_role DROP CONSTRAINT actor_role_roles_name_key;
82 ALTER TABLE ONLY public.actor DROP CONSTRAINT actor_pkey;
83 ALTER TABLE ONLY public.actor_permission DROP CONSTRAINT
       actor_permission_permissions_id_key;
84 DROP TABLE public.tournamentgroup_team;
85 DROP TABLE public.tournamentgroup_match;
86 DROP TABLE public.tournamentgroup;
87 DROP TABLE public.tournament_stadium;
88 DROP TABLE public.tournament_country;
89 DROP TABLE public.tournament;
90 DROP TABLE public.team_player;
91 DROP TABLE public.team_advisor;
92 DROP TABLE public.role_permission;
93 DROP TABLE public."role";
94 DROP TABLE public.resource;
95 DROP TABLE public.person_team;
96 DROP TABLE public.person;
97 DROP TABLE public.permission;
98 DROP TABLE public.matchevent;
99 DROP TABLE public.match_matchevent;
100 DROP TABLE public.match_match;
101 DROP TABLE public."match";
102 DROP SEQUENCE public.hibernate_sequence;
103 DROP TABLE public.groupstage_tournamentgroup;
104 DROP TABLE public.advisor;
105 DROP TABLE public.actor_role;
106 DROP TABLE public.actor_permission;
107 DROP TABLE public.actor;
108 DROP FUNCTION public.getstadiumsforcountry(bigint);
109 DROP TABLE public.stadium;
110 DROP FUNCTION public.getplayer();
111 DROP TABLE public.player;
112 DROP FUNCTION public.getnextsequence();
113 DROP FUNCTION public.getcountry();
114 DROP TABLE public.country;
115 DROP FUNCTION public.generateteam();
116 DROP TABLE public.team;
117 DROP FUNCTION public.generatematch(bigint, bigint, bigint);
118 DROP FUNCTION public.generateknockouttree("integer", bigint);
119 DROP FUNCTION public.generategroupstage();
120 DROP TABLE public.groupstage;
121 DROP FUNCTION public.generategroupmatches(bigint);
122 DROP FUNCTION public.createchampionship("integer", text);
123 DROP FUNCTION public.concat("character varying", bigint);
124 DROP FUNCTION public.concat("character varying", "integer");
125 DROP PROCEDURAL LANGUAGE plpgsql;
126 DROP SCHEMA public;
127 --
128 -- Name: public; Type: SCHEMA; Schema: -; Owner: postgres
129 --
```

```
130
131 CREATE SCHEMA public;
132
133
134 ALTER SCHEMA public OWNER TO postgres;
135
136 --
137 -- Name: plpgsql; Type: PROCEDURAL LANGUAGE; Schema: -; Owner: postgres
138 --
139
140 CREATE PROCEDURAL LANGUAGE plpgsql;
141
142
143 ALTER PROCEDURAL LANGUAGE plpgsql OWNER TO postgres;
144
145 SET search_path = public, pg_catalog;
146
147 --
148 -- Name: concat(character varying, integer); Type: FUNCTION; Schema: public; Owner:
        postgres
149 --
150
151 CREATE FUNCTION concat(character varying, integer) RETURNS character varying
152     LANGUAGE plpgsql
153     AS $_$
154 BEGIN
155     return $1 || ' ' || chr(49 + ($2%119));
156 END
157 $_$;
158
159
160 ALTER FUNCTION public.concat(character varying, integer) OWNER TO postgres;
161
162 --
163 -- Name: concat(character varying, bigint); Type: FUNCTION; Schema: public; Owner:
        postgres
164 --
165
166 CREATE FUNCTION concat(character varying, bigint) RETURNS character varying
167     LANGUAGE plpgsql
168     AS $_$
169 BEGIN
170     return $1 || ' ' || chr(CAST(49 + ($2%119) AS INT));
171 END
172 $_$;
173
174
175 ALTER FUNCTION public.concat(character varying, bigint) OWNER TO postgres;
176
177 --
178 -- Name: createchampionship(integer, text); Type: FUNCTION; Schema: public; Owner:
        postgres
179 --
180
181 CREATE FUNCTION createchampionship(integer, text) RETURNS void
182     LANGUAGE plpgsql
183     AS $_$
184 DECLARE
185     yearParam ALIAS FOR $1;
186     nameParam ALIAS FOR $2;
187     host country%ROWTYPE;
188     currentStadium stadium%ROWTYPE;
189     groupStage groupstage%ROWTYPE;
190     finalId bigint;
191 BEGIN
192     RAISE NOTICE 'Creating a new tournament';
193
194   --Generiert die K.O.-Phase
```

```
195     finalId := getNextSequence();
196     INSERT INTO match(id, name, played, dtype)
197     VALUES (finalId, 'Finale', false, 'KnockoutMatch');
198     PERFORM generateKnockoutTree(1, finalId);
199
200     --Generiert die Gruppenphase
201     groupStage := generateGroupStage();
202
203     --Speichert das Turnier ab
204     INSERT INTO tournament (year, name, finalmatch_id, groupstage_id)
205     VALUES (yearParam, nameParam, finalId, groupStage.id);
206
207     -- Set a random host country
208     host := getCountry();
209     INSERT INTO "tournament_country" VALUES (yearParam, host.id);
210
211     -- Set 8 random stadiums
212     FOR currentStadium IN SELECT * FROM getStadiumsForCountry(host.id) LOOP
213         INSERT INTO tournament_stadium VALUES(yearParam,currentStadium.stadiumid);
214     END LOOP;
215   RETURN;
216 END;
217 $_$;
218
219
220 ALTER FUNCTION public.createchampionship(integer, text) OWNER TO postgres;
221
222 --
223 -- Name: generategroupmatches(bigint); Type: FUNCTION; Schema: public; Owner: postgres
224 --
225
226 CREATE FUNCTION generategroupmatches(bigint) RETURNS void
227     LANGUAGE plpgsql
228     AS $_$
229 DECLARE
230     groupId ALIAS FOR $1;
231     numberOfTeams int;
232     currentTeam team%ROWTYPE;
233     teams team[];
234     i int;
235     j int;
236 BEGIN
237
238     SELECT COUNT(*) INTO numberOfTeams
239     FROM tournamentgroup_team
240     WHERE tournamentgroup_groupid = groupId;
241
242   -- Test ob genuegend Teams in der Gruppe sind
243     if(numberOfTeams < 4) THEN
244         RAISE EXCEPTION 'at least 4 teams have to be in a group';
245         RETURN;
246     END IF;
247
248
249     -- Erstellt ein Array aus dem Teams der Gruppe
250     teams := '{}';
251     FOR currentTeam IN
252         SELECT t.*
253         FROM team t
254         JOIN tournamentgroup_team g ON (g.teams_id = t.id)
255         WHERE tournamentgroup_groupid = groupId
256     LOOP
257         teams := array_append(teams, currentTeam);
258     END LOOP;
259
260   -- Laesst jede Mannschaft einmal gegen alle anderen Manschaften antreten
261     FOR i IN 1..4 LOOP
262         FOR j IN (i+1)..4 LOOP
```

```
263             PERFORM generateMatch(teams[i].id, teams[j].id, groupId);
264         END LOOP;
265     END LOOP;
266
267     return;
268
269 END
270 $_$;
271
272
273 ALTER FUNCTION public.generategroupmatches(bigint) OWNER TO postgres;
274
275 SET default_tablespace = '';
276
277 SET default_with_oids = false;
278
279 --
280 -- Name: groupstage; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
281 --
282
283 CREATE TABLE groupstage (
284     id bigint NOT NULL
285 );
286
287
288 ALTER TABLE public.groupstage OWNER TO postgres;
289
290 --
291 -- Name: generategroupstage(); Type: FUNCTION; Schema: public; Owner: postgres
292 --
293
294 CREATE FUNCTION generategroupstage() RETURNS groupstage
295     LANGUAGE plpgsql
296     AS $$
297 DECLARE
298     stageId int;
299     stage groupstage;
300     currentTeam team;
301     currentGroup tournamentgroup;
302     currentGroupId bigint;
303     i int;
304     j int;
305 BEGIN
306     stageId := getNextSequence();
307
308     INSERT INTO groupstage VALUES (stageId);
309
310     -- Fuer alle 8 Gruppen
311     FOR i IN 1..8 LOOP
312         currentGroupId := getNextSequence();
313
314         INSERT INTO tournamentgroup (groupid, name)
315         VALUES (currentGroupId, concat('Gruppe', 10));
316
317         -- generiere 4 Mannschaften
318         FOR j IN 1..4 LOOP
319             currentTeam := generateTeam();
320
321             INSERT INTO tournamentgroup_team (tournamentgroup_groupid, teams_id)
322             VALUES (currentGroupId, currentTeam.id);
323         END LOOP;
324
325         INSERT INTO groupstage_tournamentgroup VALUES (stageId, currentGroupId);
326
327     -- und trage die Gruppenspiele ein
328         PERFORM generateGroupMatches(currentGroupId);
329
330     END LOOP;
```

```
331
332     SELECT * INTO stage FROM groupstage WHERE id = stageId;
333
334     return stage;
335
336 END
337 $$;
338
339
340 ALTER FUNCTION public.generategroupstage() OWNER TO postgres;
341
342 --
343 -- Name: generateknockouttree(integer, bigint); Type: FUNCTION; Schema: public; Owner:
        postgres
344 --
345
346 CREATE FUNCTION generateknockouttree(integer, bigint) RETURNS void
347     LANGUAGE plpgsql
348     AS $_$
349 DECLARE
350     height ALIAS FOR $1;
351     nodeId ALIAS FOR $2;
352     matchId1 bigint;
353     matchId2 bigint;
354     newHeight int;
355     knockoutMatchType varchar;
356 BEGIN
357   --Rekursionsanker
358     IF(height > 3) THEN
359         RETURN;
360     ELSIF (height = 1) THEN
361         knockoutMatchType := 'Halbfinale';
362     ELSIF (height = 2) THEN
363         knockoutMatchType := 'Viertelfinale';
364     ELSIF (height = 3) THEN
365         knockoutMatchType := 'Achtelfinale';
366     END IF;
367
368
369   -- Erstellen zweier Kindspiele
370     matchId1 := getNextSequence();
371     INSERT INTO match(id, name, played, dtype)
372     VALUES (matchId1, knockoutMatchType, false, 'KnockoutMatch');
373
374     matchId2 := getNextSequence();
375     INSERT INTO match(id, name, played, dtype)
376     VALUES (matchId2, knockoutMatchType, false, 'KnockoutMatch');
377
378   -- Hinzufuegen zum Baum
379     INSERT INTO match_match(match_id, childs_id) VALUES (nodeId, matchId1);
380     INSERT INTO match_match(match_id, childs_id) VALUES (nodeId, matchId2);
381
382   -- rekursiver Aufruf
383     newHeight := height + 1;
384     PERFORM generateKnockoutTree(newHeight, matchId1);
385     PERFORM generateKnockoutTree(newHeight, matchId2);
386
387     RETURN;
388 END;
389 $_$;
390
391
392 ALTER FUNCTION public.generateknockouttree(integer, bigint) OWNER TO postgres;
393
394 --
395 -- Name: generatematch(bigint, bigint, bigint); Type: FUNCTION; Schema: public; Owner:
        postgres
396 --
```

```
397
398 CREATE FUNCTION generatematch(bigint, bigint, bigint) RETURNS void
399     LANGUAGE plpgsql
400     AS $_$
401 DECLARE
402     hostTeam ALIAS FOR $1;
403     guestTeam ALIAS FOR $2;
404     groupId ALIAS FOR $3;
405     matchId bigint;
406     i int;
407 BEGIN
408     matchId := getNextSequence();
409
410     INSERT INTO match(id, hostteam_id, guestteam_id, played, dtype, group_groupid)
411     VALUES (matchId, hostTeam, guestTeam, false,'GroupMatch', groupId);
412
413     INSERT INTO tournamentgroup_match
414     VALUES (groupId, matchId);
415 END
416 $_$;
417
418
419 ALTER FUNCTION public.generatematch(bigint, bigint, bigint) OWNER TO postgres;
420
421 --
422 -- Name: team; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
423 --
424
425 CREATE TABLE team (
426     id bigint NOT NULL,
427     name character varying(255),
428     country_id bigint
429 );
430
431
432 ALTER TABLE public.team OWNER TO postgres;
433
434 --
435 -- Name: generateteam(); Type: FUNCTION; Schema: public; Owner: postgres
436 --
437
438 CREATE FUNCTION generateteam() RETURNS team
439     LANGUAGE plpgsql
440     AS $$
441 DECLARE
442     i int;
443     j int;
444     sequenceValue int;
445     playerId int;
446     selectedTeam Team%ROWTYPE;
447 BEGIN
448     SELECT id INTO i FROM getCountry();
449
450     sequenceValue := getNextSequence();
451
452     INSERT INTO team VALUES (sequenceValue, concat('Musterteam ', sequenceValue), i);
453     SELECT * INTO selectedTeam FROM team WHERE id = sequenceValue;
454
455     FOR j IN 1..23 LOOP
456         SELECT id INTO playerId FROM getPlayer();
457         INSERT INTO team_player VALUES (selectedTeam.id, playerId);
458         INSERT INTO person_team VALUES (playerId, selectedTeam.id);
459     END LOOP;
460
461     return selectedTeam;
462 END
463 $$;
464
```

```
465
466 ALTER FUNCTION public.generateteam() OWNER TO postgres;
467
468 --
469 -- Name: country; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
470 --
471
472 CREATE TABLE country (
473     id bigint NOT NULL,
474     name character varying(255)
475 );
476
477
478 ALTER TABLE public.country OWNER TO postgres;
479
480 --
481 -- Name: getcountry(); Type: FUNCTION; Schema: public; Owner: postgres
482 --
483
484 CREATE FUNCTION getcountry() RETURNS SETOF country
485     LANGUAGE plpgsql
486     AS $$
487 DECLARE
488     selectedRow Country%ROWTYPE;
489     n int := 0;
490 BEGIN
491     SELECT COUNT(*) INTO n FROM Country;
492     IF(n < 1) THEN
493         INSERT INTO Country VALUES (getNextSequence(), 'DummyLand');
494     END IF;
495
496     SELECT * INTO selectedRow FROM Country ORDER BY RANDOM() LIMIT 1;
497     RETURN NEXT selectedRow;
498 END
499 $$;
500
501
502 ALTER FUNCTION public.getcountry() OWNER TO postgres;
503
504 --
505 -- Name: getnextsequence(); Type: FUNCTION; Schema: public; Owner: postgres
506 --
507
508 CREATE FUNCTION getnextsequence() RETURNS bigint
509     LANGUAGE sql
510     AS $$
511     SELECT nextval('hibernate_sequence') FROM hibernate_sequence;
512 $$;
513
514
515 ALTER FUNCTION public.getnextsequence() OWNER TO postgres;
516
517 --
518 -- Name: player; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
519 --
520
521 CREATE TABLE player (
522     club character varying(255),
523     nickname character varying(255),
524     id bigint NOT NULL
525 );
526
527
528 ALTER TABLE public.player OWNER TO postgres;
529
530 --
531 -- Name: getplayer(); Type: FUNCTION; Schema: public; Owner: postgres
532 --
```

```
533
534 CREATE FUNCTION getplayer() RETURNS player
535     LANGUAGE plpgsql
536     AS $$
537 DECLARE
538     createdPlayer Player%ROWTYPE;
539     sequenceValue bigint;
540 BEGIN
541     sequenceValue := getNextSequence();
542
543     INSERT INTO person (id, firstname, lastname)
544     VALUES (sequenceValue, concat('Vorname', sequenceValue), concat('Nachname',
            sequenceValue));
545
546     INSERT INTO player (id, nickname, club)
547     VALUES (sequenceValue, concat('Nick', sequenceValue), 'FC Seehaeusl');
548
549     SELECT * INTO createdPlayer FROM player WHERE id = sequenceValue;
550
551     return createdPlayer;
552 END
553 $$;
554
555
556 ALTER FUNCTION public.getplayer() OWNER TO postgres;
557
558 --
559 -- Name: stadium; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
560 --
561
562 CREATE TABLE stadium (
563     stadiumid bigint NOT NULL,
564     capacity integer NOT NULL,
565     city character varying(255),
566     name character varying(255),
567     country_id bigint
568 );
569
570
571 ALTER TABLE public.stadium OWNER TO postgres;
572
573 --
574 -- Name: getstadiumsforcountry(bigint); Type: FUNCTION; Schema: public; Owner: postgres
575 --
576
577 CREATE FUNCTION getstadiumsforcountry(bigint) RETURNS SETOF stadium
578     LANGUAGE plpgsql
579     AS $_$
580 DECLARE
581     countryId ALIAS FOR $1;
582     selectedRow Stadium%ROWTYPE;
583     n int := 0;
584     i int;
585 BEGIN
586     SELECT COUNT(*) INTO n FROM Stadium WHERE country_id = countryId;
587     IF(n < 8) THEN
588         FOR i IN 1..(8-n) LOOP
589             INSERT INTO Stadium VALUES (getNextSequence(), 500, concat('Dummystadt',i) ,
                    concat('Dummystadion',i), countryId);
590         END LOOP;
591     END IF;
592
593     FOR selectedRow IN SELECT * FROM stadium ORDER BY RANDOM() LIMIT 8 LOOP
594         return next selectedRow;
595     END LOOP;
596
597     return;
598 END
```

```
$_$;


ALTER FUNCTION public.getstadiumsforcountry(bigint) OWNER TO postgres;

--
-- Name: actor; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE actor (
    email character varying(255) NOT NULL,
    password_hash character varying(255)
);


ALTER TABLE public.actor OWNER TO postgres;

--
-- Name: actor_permission; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE actor_permission (
    actor_email character varying(255) NOT NULL,
    permissions_id bigint NOT NULL
);


ALTER TABLE public.actor_permission OWNER TO postgres;

--
-- Name: actor_role; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE actor_role (
    actor_email character varying(255) NOT NULL,
    roles_name character varying(255) NOT NULL
);


ALTER TABLE public.actor_role OWNER TO postgres;

--
-- Name: advisor; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE advisor (
    task character varying(255),
    id bigint NOT NULL
);


ALTER TABLE public.advisor OWNER TO postgres;

--
-- Name: groupstage_tournamentgroup; Type: TABLE; Schema: public; Owner: postgres;
    Tablespace:
--

CREATE TABLE groupstage_tournamentgroup (
    groupstage_id bigint NOT NULL,
    groups_groupid bigint NOT NULL
);


ALTER TABLE public.groupstage_tournamentgroup OWNER TO postgres;

--
-- Name: hibernate_sequence; Type: SEQUENCE; Schema: public; Owner: postgres
```

```
--

CREATE SEQUENCE hibernate_sequence
    START WITH 1
    INCREMENT BY 1
    NO MAXVALUE
    NO MINVALUE
    CACHE 1;


ALTER TABLE public.hibernate_sequence OWNER TO postgres;

--
-- Name: match; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE match (
    dtype character varying(31) NOT NULL,
    id bigint NOT NULL,
    date timestamp without time zone,
    name character varying(255),
    played boolean NOT NULL,
    guestteam_id bigint,
    hostteam_id bigint,
    stadium_stadiumid bigint,
    tournament_year integer,
    group_groupid bigint
);


ALTER TABLE public.match OWNER TO postgres;

--
-- Name: match_match; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE match_match (
    match_id bigint NOT NULL,
    childs_id bigint NOT NULL
);


ALTER TABLE public.match_match OWNER TO postgres;

--
-- Name: match_matchevent; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE match_matchevent (
    match_id bigint NOT NULL,
    events_id bigint NOT NULL
);


ALTER TABLE public.match_matchevent OWNER TO postgres;

--
-- Name: matchevent; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
--

CREATE TABLE matchevent (
    dtype character varying(31) NOT NULL,
    id bigint NOT NULL,
    additionalminute integer NOT NULL,
    minute integer NOT NULL,
    color character varying(255),
    match_id bigint,
    involvedplayer_id bigint,
```

```
734     team_id bigint,
735     scorringteam_id bigint,
736     newplayer_id bigint
737 );
738
739
740 ALTER TABLE public.matchevent OWNER TO postgres;
741
742 --
743 -- Name: permission; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
744 --
745
746 CREATE TABLE permission (
747     id bigint NOT NULL,
748     typeofaccess integer,
749     resource_id bigint
750 );
751
752
753 ALTER TABLE public.permission OWNER TO postgres;
754
755 --
756 -- Name: person; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
757 --
758
759 CREATE TABLE person (
760     id bigint NOT NULL,
761     birthday timestamp without time zone,
762     firstname character varying(255),
763     height integer,
764     lastname character varying(255),
765     weight integer
766 );
767
768
769 ALTER TABLE public.person OWNER TO postgres;
770
771 --
772 -- Name: person_team; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
773 --
774
775 CREATE TABLE person_team (
776     person_id bigint NOT NULL,
777     teams_id bigint NOT NULL
778 );
779
780
781 ALTER TABLE public.person_team OWNER TO postgres;
782
783 --
784 -- Name: resource; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
785 --
786
787 CREATE TABLE resource (
788     id bigint NOT NULL,
789     key bytea,
790     name character varying(255)
791 );
792
793
794 ALTER TABLE public.resource OWNER TO postgres;
795
796 --
797 -- Name: role; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
798 --
799
800 CREATE TABLE role (
801     name character varying(255) NOT NULL,
```

```
802     inheritedrole_name character varying(255),
803     tournament_year integer
804 );
805
806
807 ALTER TABLE public.role OWNER TO postgres;
808
809 --
810 -- Name: role_permission; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
811 --
812
813 CREATE TABLE role_permission (
814     role_name character varying(255) NOT NULL,
815     permissions_id bigint NOT NULL
816 );
817
818
819 ALTER TABLE public.role_permission OWNER TO postgres;
820
821 --
822 -- Name: team_advisor; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
823 --
824
825 CREATE TABLE team_advisor (
826     team_id bigint NOT NULL,
827     advisors_id bigint NOT NULL
828 );
829
830
831 ALTER TABLE public.team_advisor OWNER TO postgres;
832
833 --
834 -- Name: team_player; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
835 --
836
837 CREATE TABLE team_player (
838     team_id bigint NOT NULL,
839     players_id bigint NOT NULL
840 );
841
842
843 ALTER TABLE public.team_player OWNER TO postgres;
844
845 --
846 -- Name: tournament; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
847 --
848
849 CREATE TABLE tournament (
850     year integer NOT NULL,
851     name character varying(255),
852     finalmatch_id bigint,
853     groupstage_id bigint,
854     matchforthirdplace_id bigint
855 );
856
857
858 ALTER TABLE public.tournament OWNER TO postgres;
859
860 --
861 -- Name: tournament_country; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
862 --
863
864 CREATE TABLE tournament_country (
865     tournament_year integer NOT NULL,
866     hostcountries_id bigint NOT NULL
867 );
868
869
```

```
870 ALTER TABLE public.tournament_country OWNER TO postgres;
871
872 --
873 -- Name: tournament_stadium; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
874 --
875
876 CREATE TABLE tournament_stadium (
877     tournament_year integer NOT NULL,
878     stadiums_stadiumid bigint NOT NULL
879 );
880
881
882 ALTER TABLE public.tournament_stadium OWNER TO postgres;
883
884 --
885 -- Name: tournamentgroup; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
886 --
887
888 CREATE TABLE tournamentgroup (
889     groupid bigint NOT NULL,
890     name character varying(255),
891     tournament_year integer
892 );
893
894
895 ALTER TABLE public.tournamentgroup OWNER TO postgres;
896
897 --
898 -- Name: tournamentgroup_match; Type: TABLE; Schema: public; Owner: postgres; Tablespace
        :
899 --
900
901 CREATE TABLE tournamentgroup_match (
902     tournamentgroup_groupid bigint NOT NULL,
903     matches_id bigint NOT NULL
904 );
905
906
907 ALTER TABLE public.tournamentgroup_match OWNER TO postgres;
908
909 --
910 -- Name: tournamentgroup_team; Type: TABLE; Schema: public; Owner: postgres; Tablespace:
911 --
912
913 CREATE TABLE tournamentgroup_team (
914     tournamentgroup_groupid bigint NOT NULL,
915     teams_id bigint NOT NULL
916 );
917
918
919 ALTER TABLE public.tournamentgroup_team OWNER TO postgres;
920
921 --
922 -- Name: actor_permission_permissions_id_key; Type: CONSTRAINT; Schema: public; Owner:
        postgres; Tablespace:
923 --
924
925 ALTER TABLE ONLY actor_permission
926     ADD CONSTRAINT actor_permission_permissions_id_key UNIQUE (permissions_id);
927
928
929 --
930 -- Name: actor_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
931 --
932
933 ALTER TABLE ONLY actor
934     ADD CONSTRAINT actor_pkey PRIMARY KEY (email);
935
```

```
936
937 --
938 -- Name: actor_role_roles_name_key; Type: CONSTRAINT; Schema: public; Owner: postgres;
        Tablespace:
939 --
940
941 ALTER TABLE ONLY actor_role
942     ADD CONSTRAINT actor_role_roles_name_key UNIQUE (roles_name);
943
944
945 --
946 -- Name: advisor_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
947 --
948
949 ALTER TABLE ONLY advisor
950     ADD CONSTRAINT advisor_pkey PRIMARY KEY (id);
951
952
953 --
954 -- Name: country_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
955 --
956
957 ALTER TABLE ONLY country
958     ADD CONSTRAINT country_pkey PRIMARY KEY (id);
959
960
961 --
962 -- Name: groupstage_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
963 --
964
965 ALTER TABLE ONLY groupstage
966     ADD CONSTRAINT groupstage_pkey PRIMARY KEY (id);
967
968
969 --
970 -- Name: groupstage_tournamentgroup_groups_groupid_key; Type: CONSTRAINT; Schema: public
        ; Owner: postgres; Tablespace:
971 --
972
973 ALTER TABLE ONLY groupstage_tournamentgroup
974     ADD CONSTRAINT groupstage_tournamentgroup_groups_groupid_key UNIQUE (groups_groupid)
            ;
975
976
977 --
978 -- Name: match_matchevent_events_id_key; Type: CONSTRAINT; Schema: public; Owner:
        postgres; Tablespace:
979 --
980
981 ALTER TABLE ONLY match_matchevent
982     ADD CONSTRAINT match_matchevent_events_id_key UNIQUE (events_id);
983
984
985 --
986 -- Name: match_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
987 --
988
989 ALTER TABLE ONLY match
990     ADD CONSTRAINT match_pkey PRIMARY KEY (id);
991
992
993 --
994 -- Name: matchevent_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
995 --
996
997 ALTER TABLE ONLY matchevent
998     ADD CONSTRAINT matchevent_pkey PRIMARY KEY (id);
999
```

```
1000
1001 --
1002 -- Name: permission_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1003 --
1004
1005 ALTER TABLE ONLY permission
1006     ADD CONSTRAINT permission_pkey PRIMARY KEY (id);
1007
1008
1009 --
1010 -- Name: person_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1011 --
1012
1013 ALTER TABLE ONLY person
1014     ADD CONSTRAINT person_pkey PRIMARY KEY (id);
1015
1016
1017 --
1018 -- Name: player_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1019 --
1020
1021 ALTER TABLE ONLY player
1022     ADD CONSTRAINT player_pkey PRIMARY KEY (id);
1023
1024
1025 --
1026 -- Name: resource_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1027 --
1028
1029 ALTER TABLE ONLY resource
1030     ADD CONSTRAINT resource_pkey PRIMARY KEY (id);
1031
1032
1033 --
1034 -- Name: role_permission_permissions_id_key; Type: CONSTRAINT; Schema: public; Owner:
        postgres; Tablespace:
1035 --
1036
1037 ALTER TABLE ONLY role_permission
1038     ADD CONSTRAINT role_permission_permissions_id_key UNIQUE (permissions_id);
1039
1040
1041 --
1042 -- Name: role_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1043 --
1044
1045 ALTER TABLE ONLY role
1046     ADD CONSTRAINT role_pkey PRIMARY KEY (name);
1047
1048
1049 --
1050 -- Name: stadium_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1051 --
1052
1053 ALTER TABLE ONLY stadium
1054     ADD CONSTRAINT stadium_pkey PRIMARY KEY (stadiumid);
1055
1056
1057 --
1058 -- Name: team_advisor_advisors_id_key; Type: CONSTRAINT; Schema: public; Owner: postgres
        ; Tablespace:
1059 --
1060
1061 ALTER TABLE ONLY team_advisor
1062     ADD CONSTRAINT team_advisor_advisors_id_key UNIQUE (advisors_id);
1063
1064
1065 --
```

```
1066 -- Name: team_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1067 --
1068
1069 ALTER TABLE ONLY team
1070     ADD CONSTRAINT team_pkey PRIMARY KEY (id);
1071
1072
1073 --
1074 -- Name: tournament_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres; Tablespace:
1075 --
1076
1077 ALTER TABLE ONLY tournament
1078     ADD CONSTRAINT tournament_pkey PRIMARY KEY (year);
1079
1080
1081 --
1082 -- Name: tournamentgroup_match_matches_id_key; Type: CONSTRAINT; Schema: public; Owner:
        postgres; Tablespace:
1083 --
1084
1085 ALTER TABLE ONLY tournamentgroup_match
1086     ADD CONSTRAINT tournamentgroup_match_matches_id_key UNIQUE (matches_id);
1087
1088
1089 --
1090 -- Name: tournamentgroup_pkey; Type: CONSTRAINT; Schema: public; Owner: postgres;
        Tablespace:
1091 --
1092
1093 ALTER TABLE ONLY tournamentgroup
1094     ADD CONSTRAINT tournamentgroup_pkey PRIMARY KEY (groupid);
1095
1096
1097 --
1098 -- Name: tournamentgroup_team_teams_id_key; Type: CONSTRAINT; Schema: public; Owner:
        postgres; Tablespace:
1099 --
1100
1101 ALTER TABLE ONLY tournamentgroup_team
1102     ADD CONSTRAINT tournamentgroup_team_teams_id_key UNIQUE (teams_id);
1103
1104
1105 --
1106 -- Name: fk1fc9f7a09b9d8d6d; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1107 --
1108
1109 ALTER TABLE ONLY advisor
1110     ADD CONSTRAINT fk1fc9f7a09b9d8d6d FOREIGN KEY (id) REFERENCES person(id);
1111
1112
1113 --
1114 -- Name: fk26e2d0c0d36f2a65; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1115 --
1116
1117 ALTER TABLE ONLY actor_role
1118     ADD CONSTRAINT fk26e2d0c0d36f2a65 FOREIGN KEY (actor_email) REFERENCES actor(email);
1119
1120
1121 --
1122 -- Name: fk26e2d0c0e4a0b3e5; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1123 --
1124
1125 ALTER TABLE ONLY actor_role
1126     ADD CONSTRAINT fk26e2d0c0e4a0b3e5 FOREIGN KEY (roles_name) REFERENCES role(name);
1127
1128
1129 --
1130 -- Name: fk26f49674b12939; Type: FK CONSTRAINT; Schema: public; Owner: postgres
```

```
--

ALTER TABLE ONLY role
    ADD CONSTRAINT fk26f49674b12939 FOREIGN KEY (tournament_year) REFERENCES tournament(year);


--
-- Name: fk26f496da563832; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY role
    ADD CONSTRAINT fk26f496da563832 FOREIGN KEY (inheritedrole_name) REFERENCES role(name);


--
-- Name: fk27b67dfcf4fc9d; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY team
    ADD CONSTRAINT fk27b67dfcf4fc9d FOREIGN KEY (country_id) REFERENCES country(id);


--
-- Name: fk3525aa1c2801c0aa; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournamentgroup_match
    ADD CONSTRAINT fk3525aa1c2801c0aa FOREIGN KEY (matches_id) REFERENCES match(id);


--
-- Name: fk3525aa1cd57db48a; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournamentgroup_match
    ADD CONSTRAINT fk3525aa1cd57db48a FOREIGN KEY (tournamentgroup_groupid) REFERENCES tournamentgroup(groupid);


--
-- Name: fk3b74360966de6d99; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournament
    ADD CONSTRAINT fk3b74360966de6d99 FOREIGN KEY (finalmatch_id) REFERENCES match(id);


--
-- Name: fk3b7436097d361fb7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournament
    ADD CONSTRAINT fk3b7436097d361fb7 FOREIGN KEY (groupstage_id) REFERENCES groupstage(id);


--
-- Name: fk3b743609fcd043a4; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournament
    ADD CONSTRAINT fk3b743609fcd043a4 FOREIGN KEY (matchforthirdplace_id) REFERENCES match(id);


--
```

```
1194 -- Name: fk46ae9a515c9d2b6; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1195 --
1196
1197 ALTER TABLE ONLY match
1198     ADD CONSTRAINT fk46ae9a515c9d2b6 FOREIGN KEY (stadium_stadiumid) REFERENCES stadium(
         stadiumid);
1199
1200
1201 --
1202 -- Name: fk46ae9a574b12939; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1203 --
1204
1205 ALTER TABLE ONLY match
1206     ADD CONSTRAINT fk46ae9a574b12939 FOREIGN KEY (tournament_year) REFERENCES tournament
         (year);
1207
1208
1209 --
1210 -- Name: fk46ae9a5d4eaebd3; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1211 --
1212
1213 ALTER TABLE ONLY match
1214     ADD CONSTRAINT fk46ae9a5d4eaebd3 FOREIGN KEY (group_groupid) REFERENCES
         tournamentgroup(groupid);
1215
1216
1217 --
1218 -- Name: fk46ae9a5e2487ff; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1219 --
1220
1221 ALTER TABLE ONLY match
1222     ADD CONSTRAINT fk46ae9a5e2487ff FOREIGN KEY (guestteam_id) REFERENCES team(id);
1223
1224
1225 --
1226 -- Name: fk46ae9a5f0ec562f; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1227 --
1228
1229 ALTER TABLE ONLY match
1230     ADD CONSTRAINT fk46ae9a5f0ec562f FOREIGN KEY (hostteam_id) REFERENCES team(id);
1231
1232
1233 --
1234 -- Name: fk49fd4907cdc8c6de; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1235 --
1236
1237 ALTER TABLE ONLY person_team
1238     ADD CONSTRAINT fk49fd4907cdc8c6de FOREIGN KEY (teams_id) REFERENCES team(id);
1239
1240
1241 --
1242 -- Name: fk49fd4907ce781a97; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1243 --
1244
1245 ALTER TABLE ONLY person_team
1246     ADD CONSTRAINT fk49fd4907ce781a97 FOREIGN KEY (person_id) REFERENCES person(id);
1247
1248
1249 --
1250 -- Name: fk5625b34074b12939; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1251 --
1252
1253 ALTER TABLE ONLY tournament_country
1254     ADD CONSTRAINT fk5625b34074b12939 FOREIGN KEY (tournament_year) REFERENCES
         tournament(year);
1255
1256
1257 --
```

```
1258 -- Name: fk5625b3409a553667; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1259 --
1260
1261 ALTER TABLE ONLY tournament_country
1262     ADD CONSTRAINT fk5625b3409a553667 FOREIGN KEY (hostcountries_id) REFERENCES country(
         id);
1263
1264
1265 --
1266 -- Name: fk57f7a1ef94470e9c; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1267 --
1268
1269 ALTER TABLE ONLY permission
1270     ADD CONSTRAINT fk57f7a1ef94470e9c FOREIGN KEY (resource_id) REFERENCES resource(id);
1271
1272
1273 --
1274 -- Name: fk62cd596526daa28; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1275 --
1276
1277 ALTER TABLE ONLY groupstage_tournamentgroup
1278     ADD CONSTRAINT fk62cd596526daa28 FOREIGN KEY (groups_groupid) REFERENCES
         tournamentgroup(groupid);
1279
1280
1281 --
1282 -- Name: fk62cd5967d361fb7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1283 --
1284
1285 ALTER TABLE ONLY groupstage_tournamentgroup
1286     ADD CONSTRAINT fk62cd5967d361fb7 FOREIGN KEY (groupstage_id) REFERENCES groupstage(
         id);
1287
1288
1289 --
1290 -- Name: fk6372df674b12939; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1291 --
1292
1293 ALTER TABLE ONLY tournamentgroup
1294     ADD CONSTRAINT fk6372df674b12939 FOREIGN KEY (tournament_year) REFERENCES tournament
         (year);
1295
1296
1297 --
1298 -- Name: fk8ea387019b9d8d6d; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1299 --
1300
1301 ALTER TABLE ONLY player
1302     ADD CONSTRAINT fk8ea387019b9d8d6d FOREIGN KEY (id) REFERENCES person(id);
1303
1304
1305 --
1306 -- Name: fka1d587dedb6578d7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1307 --
1308
1309 ALTER TABLE ONLY team_advisor
1310     ADD CONSTRAINT fka1d587dedb6578d7 FOREIGN KEY (team_id) REFERENCES team(id);
1311
1312
1313 --
1314 -- Name: fka1d587deea5528a; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1315 --
1316
1317 ALTER TABLE ONLY team_advisor
1318     ADD CONSTRAINT fka1d587deea5528a FOREIGN KEY (advisors_id) REFERENCES advisor(id);
1319
1320
1321 --
```

```
-- Name: fkabf317a774b12939; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournament_stadium
    ADD CONSTRAINT fkabf317a774b12939 FOREIGN KEY (tournament_year) REFERENCES
        tournament(year);


--
-- Name: fkabf317a7db034f8f; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournament_stadium
    ADD CONSTRAINT fkabf317a7db034f8f FOREIGN KEY (stadiums_stadiumid) REFERENCES
        stadium(stadiumid);


--
-- Name: fkb7678b26cdc8c6de; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournamentgroup_team
    ADD CONSTRAINT fkb7678b26cdc8c6de FOREIGN KEY (teams_id) REFERENCES team(id);


--
-- Name: fkb7678b26d57db48a; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY tournamentgroup_team
    ADD CONSTRAINT fkb7678b26d57db48a FOREIGN KEY (tournamentgroup_groupid) REFERENCES
        tournamentgroup(groupid);


--
-- Name: fkbfc93acf60766fd; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY match_matchevent
    ADD CONSTRAINT fkbfc93acf60766fd FOREIGN KEY (match_id) REFERENCES match(id);


--
-- Name: fkbfc93acfdcc26853; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY match_matchevent
    ADD CONSTRAINT fkbfc93acfdcc26853 FOREIGN KEY (events_id) REFERENCES matchevent(id);


--
-- Name: fkcf243699401023a7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY actor_permission
    ADD CONSTRAINT fkcf243699401023a7 FOREIGN KEY (permissions_id) REFERENCES permission
        (id);


--
-- Name: fkcf243699d36f2a65; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY actor_permission
    ADD CONSTRAINT fkcf243699d36f2a65 FOREIGN KEY (actor_email) REFERENCES actor(email);


--
```

```
-- Name: fkd4e5f70318f27aa6; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY team_player
    ADD CONSTRAINT fkd4e5f70318f27aa6 FOREIGN KEY (players_id) REFERENCES player(id);


--
-- Name: fkd4e5f703db6578d7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY team_player
    ADD CONSTRAINT fkd4e5f703db6578d7 FOREIGN KEY (team_id) REFERENCES team(id);


--
-- Name: fkd7c3a68b1fd58223; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY match_match
    ADD CONSTRAINT fkd7c3a68b1fd58223 FOREIGN KEY (match_id) REFERENCES match(id);


--
-- Name: fkd7c3a68b884bbd1; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY match_match
    ADD CONSTRAINT fkd7c3a68b884bbd1 FOREIGN KEY (childs_id) REFERENCES match(id);


--
-- Name: fke491d7f560766fd; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY matchevent
    ADD CONSTRAINT fke491d7f560766fd FOREIGN KEY (match_id) REFERENCES match(id);


--
-- Name: fke491d7f56a9e6294; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY matchevent
    ADD CONSTRAINT fke491d7f56a9e6294 FOREIGN KEY (scorringteam_id) REFERENCES team(id);


--
-- Name: fke491d7f5c7168977; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY matchevent
    ADD CONSTRAINT fke491d7f5c7168977 FOREIGN KEY (newplayer_id) REFERENCES player(id);


--
-- Name: fke491d7f5db6578d7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY matchevent
    ADD CONSTRAINT fke491d7f5db6578d7 FOREIGN KEY (team_id) REFERENCES team(id);


--
-- Name: fke491d7f5df1dd7b0; Type: FK CONSTRAINT; Schema: public; Owner: postgres
--

ALTER TABLE ONLY matchevent
```

```
1454      ADD CONSTRAINT fke491d7f5df1dd7b0 FOREIGN KEY (involvedplayer_id) REFERENCES player(
              id);
1455
1456
1457 --
1458 -- Name: fkf21d53ddfcf4fc9d; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1459 --
1460
1461 ALTER TABLE ONLY stadium
1462      ADD CONSTRAINT fkf21d53ddfcf4fc9d FOREIGN KEY (country_id) REFERENCES country(id);
1463
1464
1465 --
1466 -- Name: fkf8a56938401023a7; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1467 --
1468
1469 ALTER TABLE ONLY role_permission
1470      ADD CONSTRAINT fkf8a56938401023a7 FOREIGN KEY (permissions_id) REFERENCES permission
              (id);
1471
1472
1473 --
1474 -- Name: fkf8a569386ac4edcc; Type: FK CONSTRAINT; Schema: public; Owner: postgres
1475 --
1476
1477 ALTER TABLE ONLY role_permission
1478      ADD CONSTRAINT fkf8a569386ac4edcc FOREIGN KEY (role_name) REFERENCES role(name);
1479
1480
1481 --
1482 -- PostgreSQL database dump complete
1483 --
```