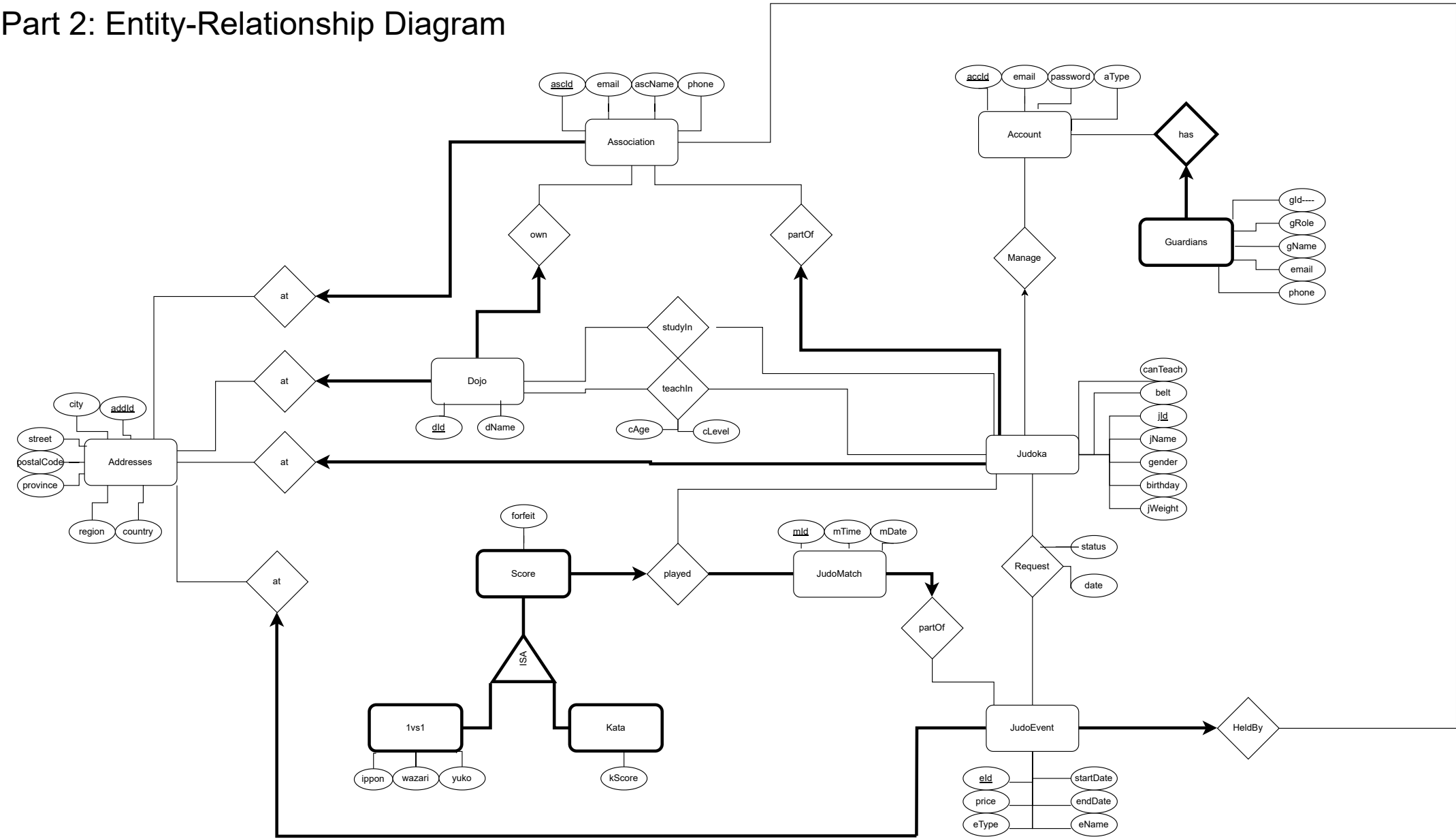


Ekin	Daniele	Edoardo
Oral	Venere	Cecca
29421	36745	36779

Judo Association Application

Our project models an application of a judo federation. The federation consists of some judo associations who certify the levels of judo athletes (“judokas”) and hold judo events. The official gender, birthdate, and weight information of judokas as well as what level (“belt”) they are and whether they have a teaching licence will be stored. An account for our application is either an individual account in which case it manages one judoka, or a family account in which case it can manage more judokas. Family accounts must have the info of some guardians registered. In our application, each judoka must be part of an association and may be studying or teaching at a gym (“dojo”). Each dojo is owned by an association. Judokas who are teaching at a dojo may only teach a certain level and age of students. Associations sometimes hold events for their judokas to attend. The application must allow judokas or their guardians to request their participation in events. Before the start of an event, a user can use our application to request an athlete that they manage to participate in an event; the request will be approved or rejected by the event. Judo events are not held jointly (one event is only held by one association). Events sometimes include some judo matches, which are always played by two judokas. Our application will only store concluded matches. Concluded matches must always have a winner, and two scores associated with the judokas in the match. Matches can be scored as 1v1 fights or showcase competitions (“kata”). Every association, event, athlete, and dojo must have an address.

Part 2: Entity-Relationship Diagram



```

1 CREATE TABLE Addresses (
2     addId INT AUTO_INCREMENT PRIMARY KEY,
3     street CHAR(40) NOT NULL,
4     city CHAR(20) NOT NULL,
5     postalCode CHAR(10) NOT NULL,
6     province CHAR(30),
7     region CHAR(30),
8     country CHAR(30) NOT NULL
9 );
10
11
12 CREATE TABLE Accounts (
13     accId INT AUTO_INCREMENT PRIMARY KEY,
14     email CHAR(40) NOT NULL,
15     aPassword VARCHAR(255) NOT NULL,
16     aType ENUM("Family", "Individual") DEFAULT "Individual" NOT NULL
17 );
18
19
20 CREATE TABLE Guardians (
21     gId INT AUTO_INCREMENT,
22     accId INT NOT NULL,
23     gRole CHAR(20),
24     gName CHAR(40) NOT NULL,
25     email CHAR(40) NOT NULL,
26     phone CHAR(13) NOT NULL,
27     PRIMARY KEY (gId, accId),
28     FOREIGN KEY (accId) REFERENCES Accounts ON DELETE CASCADE
29 );
30
31
32 CREATE TABLE Association (
33     ascId INT AUTO_INCREMENT PRIMARY KEY,
34     ascName CHAR(40) NOT NULL,
35     email CHAR(40) NOT NULL,
36     phone CHAR(13),
37     addId INT NOT NULL,
38     FOREIGN KEY (addId) REFERENCES Addresses
39 );
40
41
42 CREATE TABLE Judoka (
43     jId INT AUTO_INCREMENT PRIMARY KEY,
44     jName CHAR(40) NOT NULL,
45     gender ENUM("Female", "Male") DEFAULT "Female" NOT NULL,
46     birthday DATE NOT NULL,
47     jWeight REAL,
48     canTeach BOOLEAN,
49     belt ENUM("white", "yellow", "orange", "green", "blue", "brown", "black") DEFAULT "white" NOT NULL,
50     addId INT NOT NULL,
51     accId INT NULL,
52     ascId INT NOT NULL,
53     FOREIGN KEY (addId) REFERENCES Addresses,
54     FOREIGN KEY (accId) REFERENCES Accounts ON DELETE SET DEFAULT,
55     FOREIGN KEY (ascId) REFERENCES Association
56 );
57
58
59 CREATE TABLE JudoEvents (
60     eId INT AUTO_INCREMENT PRIMARY KEY,
61     eName CHAR(40) NOT NULL,
62     price REAL,
63     eType ENUM("Competition", "Stage", "Event") DEFAULT "Event" NOT NULL,
64     startDate DATE NOT NULL,
65     endDate DATE NOT NULL,
66     addId INT NOT NULL,
67     ascId INT NOT NULL,
68     FOREIGN KEY (addId) REFERENCES Addresses,
69     FOREIGN KEY (ascId) REFERENCES Association ON DELETE CASCADE
70 );

```

```

70 );
71
72
73 CREATE TABLE Dojo (
74     dId INT AUTO_INCREMENT PRIMARY KEY,
75     dName CHAR(40) NOT NULL,
76     addId INT NOT NULL,
77     ascId INT NOT NULL,
78     FOREIGN KEY (addId) REFERENCES Addresses,
79     FOREIGN KEY (ascId) REFERENCES Association
80 );
81
82
83 CREATE TABLE JudoMatch (
84     mId INT AUTO_INCREMENT PRIMARY KEY,
85     mTime REAL,
86     mDate DATE,
87     eId INT NOT NULL,
88     FOREIGN KEY (eId) REFERENCES JudoEvents ON DELETE CASCADE
89 );
90
91
92
93 CREATE TABLE PlayedScore (
94     jId INT NOT NULL,
95     mId INT NOT NULL,
96     forfeit boolean,
97     ippon INT,
98     wazari INT,
99     yuko INT,
100    kScore INT,
101    PRIMARY KEY (jId, mId),
102    FOREIGN KEY (jId) REFERENCES Judoka,
103    FOREIGN KEY (mId) REFERENCES JudoMatch ON DELETE CASCADE
104 );
105
106
107 CREATE TABLE Request(
108     jId INT,
109     eId INT,
110     rStatus ENUM ("Submitted", "Rejected", "Approved") DEFAULT "Submitted" NOT NULL,
111     rDate DATE NOT NULL,
112     PRIMARY KEY (jId, eId),
113     FOREIGN KEY (jId) REFERENCES Judoka,
114     FOREIGN KEY (eId) REFERENCES JudoEvents ON DELETE CASCADE
115 );
116
117
118 CREATE TABLE StudyIn(
119     dId INT,
120     jId INT,
121     PRIMARY KEY (dId, jId),
122     FOREIGN KEY (jId) REFERENCES Judoka,
123     FOREIGN KEY (dId) REFERENCES Dojo ON DELETE CASCADE
124 );
125
126
127 CREATE TABLE TeachIn(
128     dId INT,
129     jId INT,
130     cAge ENUM("Kids", "Adult", "Elderly") Default "Kids",
131     cLevel ENUM("Beginner", "Intermediate", "Advanced") DEFAULT "Beginner",
132     PRIMARY KEY (dId, jId),
133     FOREIGN KEY (jId) REFERENCES Judoka,
134     FOREIGN KEY (dId) REFERENCES Dojo ON DELETE CASCADE
135 );

```

```

1  INSERT INTO Addresses (addId, street, city, postalCode, province, region, country) VALUES
2  (1, 'Via Roma 42', 'Torino', '20121', 'Torino', 'Lombardia', 'Italy'),
3  (2, 'Corso Italia 15', 'Roma', '00187', 'Roma', 'Lazio', 'Italy'),
4  (3, 'Via Dante Alighieri 8', 'Firenze', '50122', 'Firenze', 'Toscana', 'Italy'),
5  (4, 'Via Garibaldi 23', 'Napoli', '80132', 'Napoli', 'Campania', 'Italy'),
6  (5, 'Via Venezia 11', 'Bologna', '40121', 'Bologna', 'Emilia-Romagna', 'Italy'),
7  (6, 'Corso Vittorio Emanuele 56', 'Torino', '10123', 'Torino', 'Piemonte', 'Italy'),
8  (7, 'Via dei Condotti 35', 'Roma', '00187', 'Roma', 'Lazio', 'Italy'),
9  (8, 'Piazza del Duomo 3', 'Milano', '20122', 'Milano', 'Lombardia', 'Italy'),
10 (9, 'Via San Lorenzo 19', 'Genova', '16123', 'Genova', 'Liguria', 'Italy'),
11 (10, 'Via Toledo 67', 'Napoli', '80134', 'Napoli', 'Campania', 'Italy');
12
13
14 INSERT INTO Accounts (accId, email, aPassword, aType) VALUES
15 (1, 'john.doe@example.com', '$2y$10$KIX/UXBLk8dFL5F5hWcE8ePP.rZq7btXNYIkRhIwwh88g4H7wn.yK', 'Individual'),
16 (2, 'jane.davis@example.com', '$2y$10$Rbm5fWd20.KQGmVvk81adhuVxj9SkeKexTIzBX1EGlUGMea8r2BNTG', 'Family'),
17 (3, 'michael.brown@example.com', '$2y$10$JlB02GHPKh8U3PfbX2a6D.vDka3W5slahv6fp2HzbQxe2XlDj91Gu', 'Individual'),
18 (4, 'alex.wilson@example.com', '$2y$10$UVPqvwz1jX4sBFopQAmM8O2DoH3f5L7B3FybnN7Ghe5i4hNjX.gWi', 'Family'),
19 (5, 'emily.jones@example.com', '$2y$10$Tq9bsq2tcrVhYzj5DiR0ur7RkeJQU7f9Mpe7DTCtXtC8n5eY/A3C', 'Individual'),
20 (6, 'chris.anderson@example.com', '$2y$10$7vmPJm8iEVFcbMdsghFeIe3dHFV.iy.5pC2PTCFsilag8WeP92qEK', 'Family'),
21 (7, 'sarah.thomas@example.com', '$2y$10$3MtY0Hro.kFvLbcA9ALyAOlCpnmXYgrgBvF/48uOCekIsM.jZ./ly', 'Individual'),
22 (8, 'lisa.taylor@example.com', '$2y$10$PmbfPDUMqHhbg.t3U8lEVOVzpYjBp2uDcrG3EUNfJevlEAK3pfbme', 'Family'),
23 (9, 'david.white@example.com', '$2y$10$Z5/A4eSPgxM6ysFVPNEuA.rC1c.QnqDmi5Kw9RkGq1RmDajvnG6DC', 'Individual'),
24 (10, 'robert.martin@example.com', '$2y$10$I04yHoqyJHY9XME3/Yq05elzPMYy5Sfg7MxutFiYH5gQoJnmH/w8m', 'Individual');
25
26
27 INSERT INTO Guardians (gId, accId, gRole, gName, email, phone) VALUES
28 (1, 2, 'Father', 'John Davis', 'john.davis@email.com', '+112345678901'),
29 (2, 2, 'Mother', 'Emily Davis', 'emily.davis@email.com', '+112345678902'),
30 (3, 2, 'Guardian', 'Michael Brown', 'michael.brown@email.com', '+112345678903'),
31 (4, 4, 'Father', 'David Wilson', 'david.wilson@email.com', '+112345678904'),
32 (5, 6, 'Mother', 'Sarah Anderson', 'sarah.anderson@email.com', '+112345678905'),
33 (6, 6, 'Relative', 'Christopher White', 'chris.white@email.com', '+112345678906'),
34 (7, 6, 'Father', 'James Anderson', 'james.anderson@email.com', '+112345678907'),
35 (8, 8, 'Guardian', 'Robert Thomas', 'robert.thomas@email.com', '+112345678908'),
36 (9, 8, 'Mother', 'Laura Garcia', 'laura.garcia@email.com', '+112345678909'),
37 (10, 8, 'Relative', 'William Martinez', 'william.martinez@email.com', '+112345678910');
38
39
40 INSERT INTO Association (ascId, ascName, email, phone, addId) VALUES
41 (1, 'Crono Sport Torino', 'info@judomilano.it', '0234567890', 1),
42 (2, 'Torino Judo Club', 'info@torinojudo.it', '0115678901', 2),
43 (3, 'Firenze Dojo Group', 'info@firenzedojo.it', '0556789012', 3),
44 (4, 'Genova Judo Team', 'info@genovajudo.it', '0107890123', 4),
45 (5, 'Palermo Judo Academy', 'info@palermojudo.it', '0918901234', 5),
46 (6, 'Bologna Judo School', 'info@bolognajudo.it', '0519012345', 6),
47 (7, 'Napoli Bushido', 'info@napolibushido.it', '0810123456', 7),
48 (8, 'Pisa Samuraj Judo', 'info@pisajudo.it', '0501234567', 8),
49 (9, 'Verona Judo Center', 'info@veronajudo.it', '0452345678', 9),
50 (10, 'Venezia Dojos', 'info@veneziadojos.it', '0413456789', 10);
51
52
53 INSERT INTO Judoka (jId, jName, gender, birthday, jWeight, canTeach, belt, addId, accId, ascId) VALUES
54 (1, 'John Doe', 'Male', '1990-05-12', 81.2, FALSE, 'black', 1, 1, 2),
55 (2, 'Michael Brown', 'Male', '2007-12-10', 90.0, FALSE, 'black', 3, 2, 2),
56 (3, 'Daniel Harris', 'Male', '2005-06-24', 81.5, FALSE, 'blue', 3, 2, 2),
57 (4, 'Emily Wilson', 'Female', '2000-03-07', 56.8, FALSE, 'blue', 4, 3, 2),
58 (5, 'Emma Clark', 'Female', '2001-04-30', 58.7, FALSE, 'orange', 10, 4, 2),
59 (6, 'Roberto Bianchi', 'Male', '1991-07-15', 85.3, TRUE, 'black', 9, 5, 2),
60 (7, 'Olivia Martinez', 'Female', '1997-11-05', 66.0, FALSE, 'brown', 8, 6, 2),
61 (8, 'Sofia Romano', 'Female', '1994-09-22', 62.7, TRUE, 'black', 5, 7, 2),
62 (9, 'Marco Rossi', 'Male', '1989-03-18', 92.1, TRUE, 'black', 7, 8, 2),
63 (10, 'Sarah Davis', 'Female', '2002-09-15', 60.2, FALSE, 'yellow', 6, 9, 2),
64 (11, 'Chris White', 'Male', '1985-02-28', 102.3, FALSE, 'white', 7, 10, 2),
65 (12, 'Olivia Martinez', 'Female', '1997-11-05', 66.0, FALSE, 'brown', 8, NULL, 1),
66 (13, 'David Wilson', 'Male', '1993-07-19', 78.4, FALSE, 'green', 4, NULL, 1),
67 (14, 'Jane Smith', 'Female', '1995-08-21', 63.5, FALSE, 'brown', 2, NULL, 1);
68
69
70 INSERT INTO JudoEvents (eId, eName, price, eType, startDate, endDate, addId, ascId) VALUES
71 (1, 'Judo Grand Prix', 50.0, 'Competition', '2025-08-01', '2025-08-02', 1, 2),
72 (2, 'International Judo Camp', 30.0, 'Stage', '2025-04-05', '2025-04-07', 2, 2),
73 (3, 'Judo Open Championship', 75.0, 'Competition', '2025-05-15', '2025-05-16', 3, 2),
74 (4, 'Judo Beginners Workshop', 20.0, 'Stage', '2025-06-01', '2025-06-02', 4, 2),
75 (5, 'Judo Masters Event', 100.0, 'Event', '2025-07-10', '2025-07-12', 5, 2),
76 (6, 'Junior Judo Cup', 45.0, 'Competition', '2025-08-20', '2025-08-21', 6, 2),
77 (7, 'Judo World Tour', 120.0, 'Event', '2025-09-05', '2025-09-07', 7, 2),
78 (8, 'Judo Summer Camp', 40.0, 'Stage', '2025-07-15', '2025-07-17', 8, 2),
79 (9, 'National Judo League', 80.0, 'Competition', '2025-10-12', '2025-10-14', 9, 2),
80 (10, 'Elite Judo Challenge', 90.0, 'Competition', '2025-12-15', '2025-12-16', 10, 2);
81
82

```

```
83 INSERT INTO Dojo (dId, dName, addId, ascId) VALUES
84     (1, 'Bushido Judo Club', 1, 1),
85     (2, 'Kodokan Training Center', 2, 2),
86     (3, 'Samurai Spirit Dojo', 3, 3),
87     (4, 'Shogun Judo Academy', 4, 4),
88     (5, 'Tatami Warriors Dojo', 5, 5),
89     (6, 'Yamato Judo Institute', 6, 6),
90     (7, 'Hikari Martial Arts', 7, 7),
91     (8, 'Kyoto Judo Club', 8, 8),
92     (9, 'Tensho Judo School', 9, 9),
93     (10, 'Shinsei Judo Academy', 10, 1);
94
95
96 INSERT INTO JudoMatch (mId, mTime, mDate, eId) VALUES
97     (1, 3.42, '2025-08-01', 1),
98     (2, 2.18, '2025-08-01', 1),
99     (3, 1.56, '2025-08-01', 1),
100    (4, 2.45, '2025-08-01', 1),
101    (5, 3.21, '2025-08-01', 1),
102    (6, 1.48, '2025-08-02', 1),
103    (7, 2.32, '2025-08-02', 1),
104    (8, 3.55, '2025-08-02', 1),
105    (9, 2.07, '2025-08-02', 1),
106    (10, 1.59, '2025-08-02', 1),
107    (11, 3.12, '2025-08-02', 1);
108
109
110 INSERT INTO PlayedScore (jId, mId, ippon, wazari, yuko, kScore, forfeit) VALUES
111     (1, 1, 1, 0, 0, NULL, FALSE),
112     (2, 1, 0, 1, 0, NULL, FALSE),
113     (1, 2, 1, 1, 3, NULL, FALSE),
114     (3, 2, 0, 0, 0, NULL, FALSE),
115     (1, 3, 0, 2, 0, NULL, FALSE),
116     (4, 3, 0, 1, 0, NULL, FALSE),
117     (2, 4, 0, 0, 0, NULL, FALSE),
118     (3, 4, 1, 0, 0, NULL, FALSE),
119     (2, 5, 1, 0, 0, NULL, FALSE),
120     (4, 5, 0, 1, 0, NULL, FALSE),
121     (3, 6, 0, 1, 0, NULL, FALSE),
122     (4, 6, 1, 0, 0, NULL, FALSE),
123     (10, 7, 0, 1, 0, NULL, FALSE),
124     (9, 7, 0, 2, 5, NULL, FALSE),
125     (10, 8, 0, 1, 4, NULL, TRUE),
126     (8, 8, 0, 0, 0, NULL, FALSE),
127     (8, 9, 0, 1, 0, NULL, FALSE),
128     (9, 9, 0, 0, 0, NULL, TRUE),
129     (6, 10, NULL, NULL, NULL, 100, FALSE),
130     (7, 10, NULL, NULL, NULL, 100, FALSE);
131
132
133 INSERT INTO Request (jId, eId, rStatus, rDate) VALUES
134     (1, 1, "Approved", "2025-06-02"),
135     (2, 1, "Approved", "2025-06-02"),
136     (1, 4, "Approved", "2025-06-02"),
137     (3, 1, "Approved", "2025-06-02"),
138     (1, 9, "Approved", "2025-06-02"),
139     (5, 1, "Approved", "2025-06-02"),
140     (2, 2, "Approved", "2025-06-02"),
141     (3, 2, "Approved", "2025-06-02"),
142     (4, 1, "Approved", "2025-06-02"),
143     (3, 6, "Approved", "2025-06-02"),
144     (4, 6, "Approved", "2025-06-02"),
145     (10, 8, "Approved", "2025-06-02"),
146     (9, 1, "Approved", "2025-06-02"),
147     (10, 1, "Approved", "2025-06-02"),
148     (8, 7, "Approved", "2025-06-02"),
149     (8, 10, "Approved", "2025-06-02"),
150     (9, 10, "Approved", "2025-06-02"),
151     (6, 1, "Approved", "2025-06-02"),
152     (7, 1, "Approved", "2025-06-02"),
153     (11, 1, "Rejected", "2025-06-02"),
154     (11, 2, "Rejected", "2025-06-02"),
155     (8, 1, "Submitted", "2025-06-02"),
156     (7, 6, "Submitted", "2025-06-02");
157
158
159 INSERT INTO StudyIn (jId, dId) VALUES
160     (1, 1),
161     (2, 2),
162     (3, 3),
163     (4, 4),
164     (5, 5),
```

```
165 (6, 6),
166 (7, 7),
167 (8, 8),
168 (9, 9),
169 (10,10);
170
171
172 INSERT INTO TeachIn (jId, dId, cAge, cLevel) VALUES
173 (6, 1, "Kids", "Beginner"),
174 (6, 2, "Kids", "Intermediate"),
175 (6, 3, "Kids", "Advanced"),
176 (6, 4, "Adult", "Beginner"),
177 (8, 5, "Adult", "Intermediate"),
178 (8, 6, "Adult", "Advanced"),
179 (8, 7, "Elderly", "Beginner"),
180 (9, 8, "Elderly", "Intermediate"),
181 (9, 9, "Elderly", "Advanced"),
182 (9,10, "Kids", "Advanced");
```