DATABASE CHAMPIONS LEAGUE 2014-2015

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Database dari UEFA Champions League rounds 2014 - 15
Terdapat 4 Rounds dalam UEFA Champions League(UEFA CL) yaitu:

Rounds 16
Quarter final
Semi-final
Final

Dalam round 16 terdapat 16 klub dari 8 negara dan liga, yaitu:
Italy : Juventus
Germany : Borussia Dortmund, Bayer Leverkusen, Schalke 04, Bayern Munich
England : Arsenal, Chelsea, Man. City
France : Paris saint-germain, AS Monaco
Spain : Real Madrid, Barcelona, Atletico Madrid
Swiss : Basel
Portugal : Porto FC
Sweden : Shakhtar Donetsk

Dalam setiap round tercatat data Nationality dari club, Liga, Nama Club, Club ID, skor dan club
mana yang menang dan lolos ke round selanjutnya.

Lalu pada Quarter Final, terdiri dari club - club yang lolos dari round of 16. Dan terdiri dari nama
data yang seperti pada round of 16 dan seterus nya sampai babak finals.

Lalu terdapat table goalscorer dimana terdiri dari nama pemain, pemain ID, jumlah goal, nama
club, dan nationality dari pemain nya sendiri.

Nationality dari goalscorer dan nationality dari club adalah berbeda.

ERD
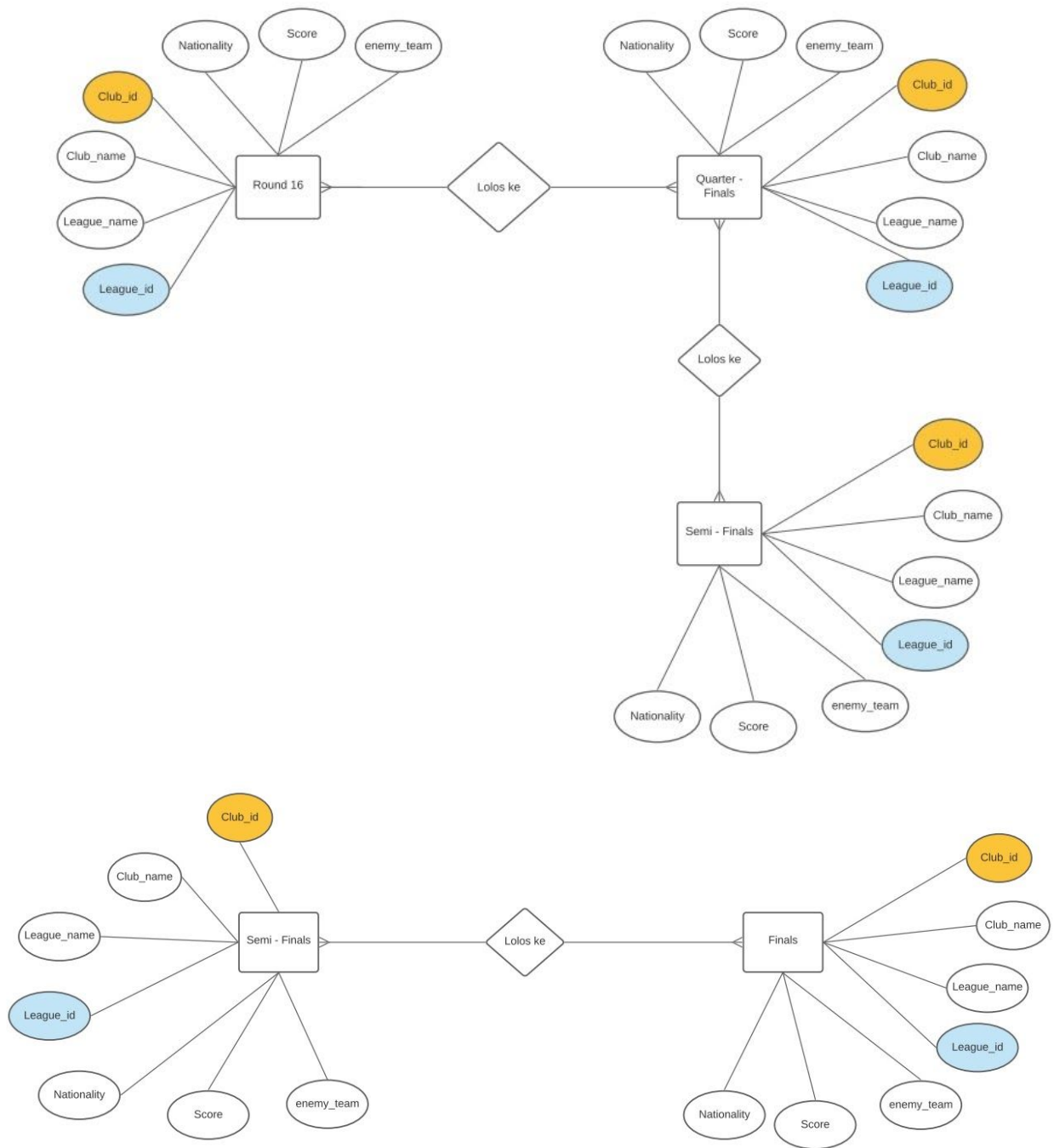
Table round_16

		Club_id	Name	League_id ▲ 1	Nationality	Score	enemy_team
☐ Ubah Salin Hapus		1	Juventus	1	Italy	5 - 1	Borussia Dortmund
☐ Ubah Salin Hapus		2	Borussia Dortmund	2	Germany	1 - 5	Juventus
☐ Ubah Salin Hapus		3	Bayer Leverkusen	2	Germany	3 - 4	Atletico Madrid
☐ Ubah Salin Hapus		4	Bayern Munich	2	Germany	7 - 0	Shakhtar Donetsk
☐ Ubah Salin Hapus		5	Schalke 04	2	Germany	4 - 5	Real Madrid
☐ Ubah Salin Hapus		6	Arsenal	3	England	3 - 3	AS Monaco
☐ Ubah Salin Hapus		7	Chelsea	3	England	3 - 3	Paris Saint-Germain
☐ Ubah Salin Hapus		8	Manchester City	3	England	1 - 3	Barcelona
☐ Ubah Salin Hapus		10	AS Monaco	4	France	3 - 3	Arsenal
☐ Ubah Salin Hapus		9	Paris Saint-Germain	4	France	3 - 3	Chelsea
☐ Ubah Salin Hapus		11	Real Madrid	5	Spain	5 - 4	Schalke 04
☐ Ubah Salin Hapus		12	Atletico Madrid	5	Spain	4 - 3	Bayer Leverkusen
☐ Ubah Salin Hapus		13	Barcelona	5	Spain	3 - 1	Manchester City
☐ Ubah Salin Hapus		14	FC Basel	6	Switzerland	1 - 5	Porto FC
☐ Ubah Salin Hapus		15	Porto FC	7	Portugal	5 - 1	FC Basel
☐ Ubah Salin Hapus		16	Shakhtar Donetsk	8	Ukraine	0 - 7	Bayern Munich

Berikut dibawah ini merupakan Query pembuatan dari table round_16 :

```sql
CREATE TABLE `round_16` (
  `Club_id` int(11) NOT NULL,
  `Name` varchar(100) NOT NULL,
  `League_id` int(11) NOT NULL,
  `Nationality` varchar(20) NOT NULL,
  `Score` varchar(20) NOT NULL,
  `enemy_team` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```sql
INSERT INTO `round_16` (`Club_id`, `Name`, `League_id`, `Nationality`,
`Score`, `enemy_team`) VALUES
(1, 'Juventus', 1, 'Italy', '5 - 1', 'Borussia Dortmund'),
(2, 'Borussia Dortmund', 2, 'Germany', '1 - 5', 'Juventus'),
(3, 'Bayer Leverkusen', 2, 'Germany', '3 - 4', 'Atletico Madrid'),
(4, 'Bayern Munich', 2, 'Germany', '7 - 0', 'Shakhtar Donetsk'),
(5, 'Schalke 04', 2, 'Germany', '4 - 5', 'Real Madrid'),
(6, 'Arsenal', 3, 'England', '3 - 3', 'AS Monaco'),
(7, 'Chelsea', 3, 'England', '3 - 3', 'Paris Saint-Germain'),
(8, 'Manchester City', 3, 'England', '1 - 3', 'Barcelona'),
(9, 'Paris Saint-Germain', 4, 'France', '3 - 3', 'Chelsea'),
(10, 'AS Monaco', 4, 'France', '3 - 3', 'Arsenal'),
(11, 'Real Madrid', 5, 'Spain', '5 - 4', 'Schalke 04'),
(12, 'Atletico Madrid', 5, 'Spain', '4 - 3', 'Bayer Leverkusen'),
(13, 'Barcelona', 5, 'Spain', '3 - 1', 'Manchester City'),
(14, 'FC Basel', 6, 'Switzerland', '1 - 5', 'Porto FC'),
(15, 'Porto FC', 7, 'Portugal', '5 - 1', 'FC Basel'),
(16, 'Shakhtar Donetsk', 8, 'Ukraine', '0 - 7', 'Bayern Munich');
```

Table quarter_finals

	Club_id	Name	League_id ▲ 1	Nationality	Score	enemy_team
☐ Ubah Salin Hapus	1	Juventus	1	Italy	1 - 0	AS Monaco
☐ Ubah Salin Hapus	4	Bayern Munich	2	Germany	7 - 4	Porto FC
☐ Ubah Salin Hapus	9	Paris Saint-Germain	4	France	1 - 5	Barcelona
☐ Ubah Salin Hapus	10	AS Monaco	4	France	0 - 1	Juventus
☐ Ubah Salin Hapus	11	Real Madrid	5	Spain	1 - 0	Atletico Madrid
☐ Ubah Salin Hapus	12	Atletico Madrid	5	Spain	0 - 1	Real Madrid
☐ Ubah Salin Hapus	13	Barcelona	5	Spain	5 - 1	Paris Saint-Germain
☐ Ubah Salin Hapus	15	Porto FC	7	Portugal	4 - 7	Bayern Munich

Berikut dibawah ini merupakan Query pembuatan dari table quarter_finals :

```sql
CREATE TABLE `quarter_finals` (
  `Club_id` int(11) NOT NULL,
  `Name` varchar(100) NOT NULL,
  `League_id` int(11) NOT NULL,
  `Nationality` varchar(20) NOT NULL,
```

```
  `Score` varchar(20) NOT NULL,
  `enemy_team` varchar(25) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `quarter_finals` (`Club_id`, `Name`, `League_id`,
`Nationality`, `Score`, `enemy_team`) VALUES
(1, 'Juventus', 1, 'Italy', '1 - 0', 'AS Monaco'),
(4, 'Bayern Munich', 2, 'Germany', '7 - 4', 'Porto FC'),
(9, 'Paris Saint-Germain', 4, 'France', '1 - 5', 'Barcelona'),
(10, 'AS Monaco', 4, 'France', '0 - 1', 'Juventus'),
(11, 'Real Madrid', 5, 'Spain', '1 - 0', 'Atletico Madrid'),
(12, 'Atletico Madrid', 5, 'Spain', '0 - 1', 'Real Madrid'),
(13, 'Barcelona', 5, 'Spain', '5 - 1', 'Paris Saint-Germain'),
(15, 'Porto FC', 7, 'Portugal', '4 - 7', 'Bayern Munich');
```

Table semi_finals

	Club_id	Name	League_id	Nationality	Score	enemy_team
☐ 🖉 Ubah 👫 Salin 🗑 Hapus	1	Juventus	1	Italy	3 - 2	Real Madrid
☐ 🖉 Ubah 👫 Salin 🗑 Hapus	4	Bayern Munich	2	Germany	3 - 5	Barcelona
☐ 🖉 Ubah 👫 Salin 🗑 Hapus	11	Real Madrid	5	Italy	2-3	Juventus
☐ 🖉 Ubah 👫 Salin 🗑 Hapus	13	Barcelona	5	Spain	5 - 3	Bayern Munich

Berikut dibawah ini merupakan Query pembuatan dari table semi_finals:

```
CREATE TABLE `semi_finals` (
  `Club_id` int(11) NOT NULL,
  `Name` varchar(100) NOT NULL,
  `League_id` int(11) NOT NULL,
  `Nationality` varchar(20) NOT NULL,
  `Score` varchar(20) NOT NULL,
  `enemy_team` varchar(20) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `semi_finals` (`Club_id`, `Name`, `League_id`, `Nationality`,
`Score`, `enemy_team`) VALUES
(1, 'Juventus', 1, 'Italy', '3 - 2', 'Real Madrid'),
(4, 'Bayern Munich', 2, 'Germany', '3 - 5', 'Barcelona'),
(11, 'Real Madrid', 5, 'Italy', '2-3', 'Juventus'),
(13, 'Barcelona', 5, 'Spain', '5 - 3', 'Bayern Munich');
```

Table finals

Berikut dibawah ini merupakan Query pembuatan dari table finals:

```sql
CREATE TABLE `finals` (
  `Club_id` int(11) NOT NULL,
  `Name` varchar(100) NOT NULL,
  `League_id` int(11) NOT NULL,
  `League` varchar(20) NOT NULL,
  `Nationality` varchar(25) NOT NULL,
  `Score` varchar(20) NOT NULL,
  `Stadium` varchar(25) NOT NULL,
  `Referee` varchar(25) NOT NULL
)
```

```sql
INSERT INTO `finals` (`Club_id`, `Name`, `League_id`, `League`,
`Nationality`, `Score`, `Stadium`, `Referee`) VALUES
(1, 'Juventus', 1, 'Serie A', 'Italy', '1 - 3', 'The Olympiastadion',
'Cüneyt Çakır'),
(13, 'Barcelona', 5, 'La Liga', 'Spain', '3 - 1', 'The Olympiastadion',
'Cüneyt Çakır');
```

Table clubs

	Club_id	Name	League
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	1	Juventus	Serie - A
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	2	Borussia Dortmund	Bundesliga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	3	Bayer Leverkusen	Bundesliga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	4	Bayern Munich	Bundesliga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	5	Schalke 04	Bundesliga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	6	Arsenal	Premier League
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	7	Chelsea	Premier League
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	8	Manchester City	Premier League
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	9	Paris Saint-Germain	Ligue 1
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	10	AS Monaco	Ligue 1
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	11	Real Madrid	La Liga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	12	Atletico Madrid	La Liga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	13	Barcelona	La Liga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	14	FC Basel	Swiss Super League
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	15	Porto FC	Primeira Liga
☐ ✏ Ubah ⅔ᵉ Salin 🖨 Hapus	16	Shakhtar Donetsk	Ukrainian Premier League

Berikut dibawah ini merupakan Query pembuatan dari table clubs

```sql
CREATE TABLE `clubs` (
  `Club_id` int(11) NOT NULL,
  `Name` varchar(30) NOT NULL,
  `League` varchar(30) NOT NULL
)
```

```sql
INSERT INTO `clubs` (`Club_id`, `Name`, `League`) VALUES
(1, 'Juventus', 'Serie - A'),
(2, 'Borussia Dortmund', 'Bundesliga'),
(3, 'Bayer Leverkusen', 'Bundesliga'),
(4, 'Bayern Munich', 'Bundesliga'),
(5, 'Schalke 04', 'Bundesliga'),
(6, 'Arsenal', 'Premier League'),
(7, 'Chelsea', 'Premier League'),
```

```
(8, 'Manchester City', 'Premier League'),
(9, 'Paris Saint-Germain', 'Ligue 1'),
(10, 'AS Monaco', 'Ligue 1'),
(11, 'Real Madrid', 'La Liga'),
(12, 'Atletico Madrid', 'La Liga'),
(13, 'Barcelona', 'La Liga'),
(14, 'FC Basel', 'Swiss Super League'),
(15, 'Porto FC', 'Primeira Liga'),
(16, 'Shakhtar Donetsk', 'Ukrainian Premier League');
```
:

Table leagues

Berikut dibawah ini merupakan Query pembuatan dari table leagues

```
CREATE TABLE `leagues` (
  `League_id` int(11) NOT NULL,
  `League` varchar(20) NOT NULL,
  `Nationality` varchar(20) NOT NULL
)
```

```
INSERT INTO `leagues` (`League_id`, `League`, `Nationality`) VALUES
(1, 'Serie A', 'Italy'),
(2, 'Bundesliga', 'Germany'),
(3, 'Premier League', 'England'),
(4, 'Ligue 1', 'France'),
(5, 'La Liga', 'Spain'),
(6, 'Swiss Super League', 'Switzerland'),
(7, 'Primeira Liga', 'Portugal'),
(8, 'Ukrainian Premier Le', 'Ukraine');
```

Table goalscorer

Berikut dibawah ini merupakan Query pembuatan dari table goalscorer

```
CREATE TABLE `goalscorer` (
  `Player_id` int(11) NOT NULL,
  `Name` varchar(25) NOT NULL,
  `Goal` int(11) NOT NULL,
  `Club` varchar(25) NOT NULL,
  `Nationality` varchar(25) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
INSERT INTO `goalscorer` (`Player_id`, `Name`, `Goal`, `Club`,
`Nationality`) VALUES
(1, 'C.Ronaldo', 10, 'Real Madrid', 'Portugal'),
(2, 'L. Messi', 10, 'Barcelona', 'Argentina'),
(3, 'Neymar', 10, 'Barcelona', 'Brazil'),
(4, 'Luiz Adriano', 9, 'Shakhtar Donetsk', 'Brazil'),
(5, 'Thomas Muller', 7, 'Bayern Munchen', 'Germany'),
(6, 'Luiz Suarez', 7, 'Barcelona', 'Uruguay'),
(7, 'Carloz Tevez', 7, 'Juventus', 'Argentina'),
(8, 'Karim Benzema', 6, 'Real Madrid', 'France'),
```

```
(9, 'Kun Aguero', 6, 'Manchester City', 'Argentina'),
(10, 'Yacine Brahimi', 5, 'FC Porto', 'Algeria');
```

Pada query dibawah ini, merupakan query dalam penambahan key dan sebagai nya dari setiap table

```
ALTER TABLE `clubs`
  ADD PRIMARY KEY (`Club_id`);


--
-- Indexes for table `finals`
--
ALTER TABLE `finals`
  ADD PRIMARY KEY (`Club_id`),
  ADD KEY `League` (`League_id`);


--
-- Indexes for table `leagues`
--
ALTER TABLE `leagues`
  ADD PRIMARY KEY (`League_id`);
--
-- Indexes for table `quarter_finals`
--
ALTER TABLE `quarter_finals`
  ADD PRIMARY KEY (`Club_id`),
  ADD KEY `League_id` (`League_id`);


--
-- Indexes for table `round_16`
--
ALTER TABLE `round_16`
  ADD PRIMARY KEY (`Club_id`),
  ADD KEY `League_id` (`League_id`);


--
-- Indexes for table `semi_finals`
```

```sql
--
ALTER TABLE `semi_finals`
  ADD PRIMARY KEY (`Club_id`),
  ADD KEY `League` (`League_id`);


--
-- AUTO_INCREMENT for dumped tables
--

--
-- AUTO_INCREMENT for table `clubs`
--
ALTER TABLE `clubs`
  MODIFY `Club_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=18;


--
-- AUTO_INCREMENT for table `finals`
--
ALTER TABLE `finals`
  MODIFY `Club_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=14;


--
-- AUTO_INCREMENT for table `leagues`
--
ALTER TABLE `leagues`
  MODIFY `League_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=9;


--
-- AUTO_INCREMENT for table `logs`
--
ALTER TABLE `logs`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=6;


--
-- AUTO_INCREMENT for table `quarter_finals`
--
ALTER TABLE `quarter_finals`
  MODIFY `Club_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=16;


--
```

```
-- AUTO_INCREMENT for table `round_16`
--

ALTER TABLE `round_16`
  MODIFY `Club_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=17;


--
-- AUTO_INCREMENT for table `semi_finals`
--

ALTER TABLE `semi_finals`
  MODIFY `Club_id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=14;
```

```
-- Constraints for table `leagues`
--

ALTER TABLE `leagues`
  ADD CONSTRAINT `League_all_ID` FOREIGN KEY (`League_id`) REFERENCES
`round_16` (`League_id`);


--
-- Constraints for table `quarter_finals`
--

ALTER TABLE `quarter_finals`
  ADD CONSTRAINT `League` FOREIGN KEY (`League_id`) REFERENCES `round_16`
(`League_id`);


--
-- Constraints for table `semi_finals`
--

ALTER TABLE `semi_finals`
  ADD CONSTRAINT `League_Semi_Finals` FOREIGN KEY (`League_id`) REFERENCES
`round_16` (`League_id`),
  ADD CONSTRAINT `League_Semi_Finals2` FOREIGN KEY (`League_id`)
REFERENCES `quarter_finals` (`League_id`);
```

Untuk tabel log digunakan untuk mencatat atau menyimpan event yang terjadi pada tabel clubs jika ada kolom yang dihapus atau ditambahkan ke dalam tabel, berikut query nya :

```
CREATE TABLE `logs` (
  `id` int(11) NOT NULL,
  `club_id` int(11) NOT NULL,
  `event` varchar(20) NOT NULL,
```

```sql
  `Time` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE
current_timestamp()
) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```sql
INSERT INTO `logs` (`id`, `club_id`, `event`, `Time`) VALUES
(4, 17, 'INSERTED', '2020-12-17 12:43:27'),
(5, 17, 'DELETED', '2020-12-17 12:44:38');
```

```sql
--
-- Indexes for table `logs`
--
ALTER TABLE `logs`
  ADD PRIMARY KEY (`id`);
```

```sql
ALTER TABLE `logs`
  MODIFY `id` int(11) NOT NULL AUTO_INCREMENT, AUTO_INCREMENT=6;
```

Untuk Trigger dibawah ini, dibuat dan terletak pada tabel clubs. Jadi untuk setiap event delete atau insert, semua akan tercatat secara otomatis ke dalam tabel logs yang menunjukan waktu dan event tersebut.

```sql
DELIMITER $$
CREATE TRIGGER `DeleteLog` BEFORE DELETE ON `clubs` FOR EACH ROW INSERT
INTO logs VALUES(null, OLD.club_id, 'DELETED', NOW())
$$
DELIMITER ;
DELIMITER $$
CREATE TRIGGER `InsertLog` AFTER INSERT ON `clubs` FOR EACH ROW INSERT
INTO logs VALUES(null, NEW.club_id, 'INSERTED',  NOW())
$$
DELIMITER ;
```