Σχολή Ηλεκτρολόγων Μηχανικών & Μηχανικών Η/Υ
Εξαμηνιαία Εργασία Βάσεων Δεδομένων: "Σχολική Βιβλιοθήκη στα Δημόσια Σχολεία"

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Περίληψη

Το παρόν είναι το παραδοτέο της Εξαμηνιαίας Εργασίας στο πλαίσιο του μαθήματος "Βάσεις Δεδομένων" του 6ου Εξαμήνου της Σχολής Ηλεκτρολόγων Μηχανικών & Μηχανικών Η/Υ του Εθνικού Μετσοβίου Πολυτεχνείου.

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Περιεχόμενα

Κεφάλαιο 1

Παραδοτέο

1.1 ER & Σχεσιακό διάγραμμα της Βάσης Δεδομένων

Το ER Διάγραμμα φαίνεται στο Σχήμα 1.1 και το Σχεσιακό Διάγρμμα φαίνεται στο Σχήμα 1.2
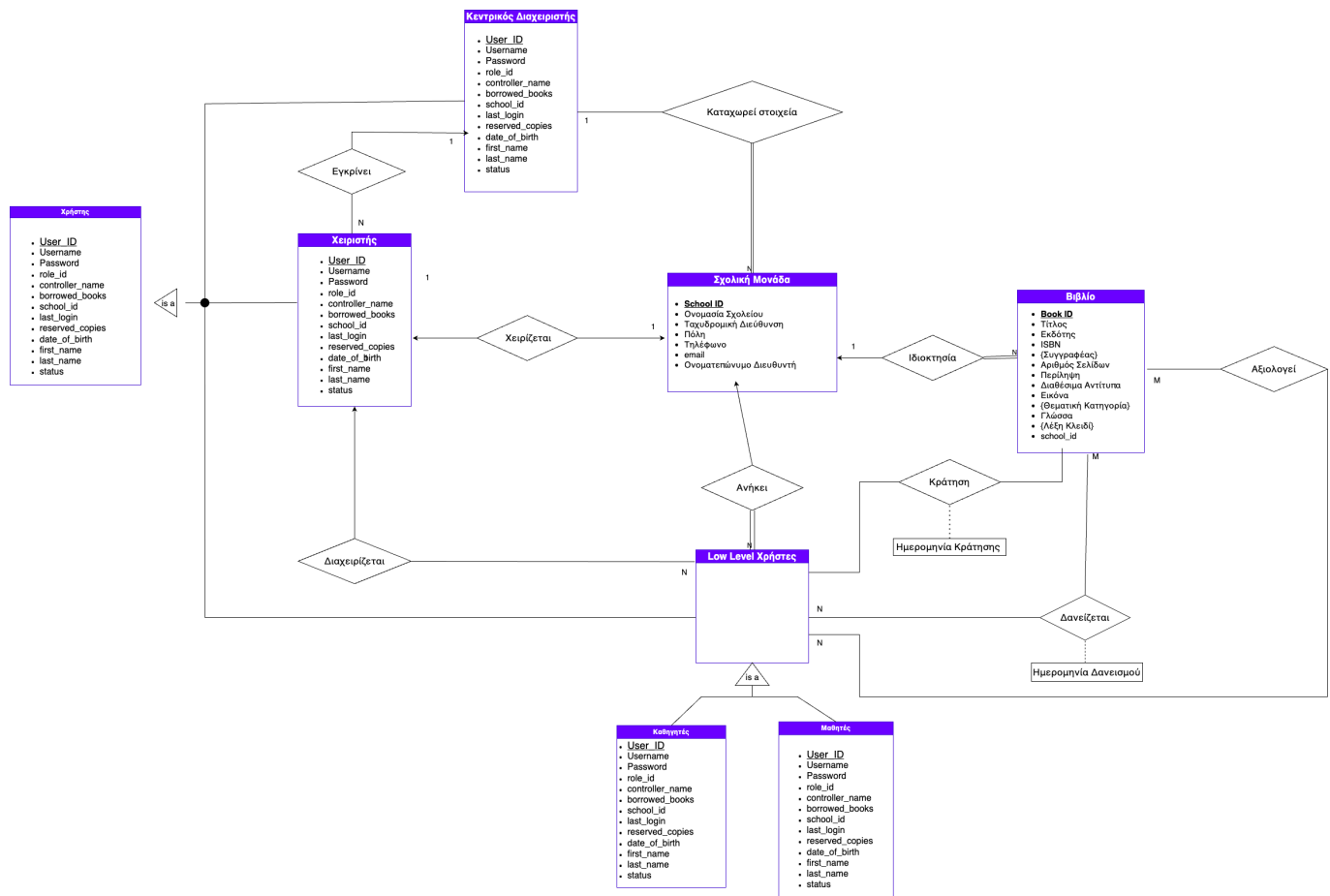
Εξηγήσεις

Role_id:

- 1: Administrator

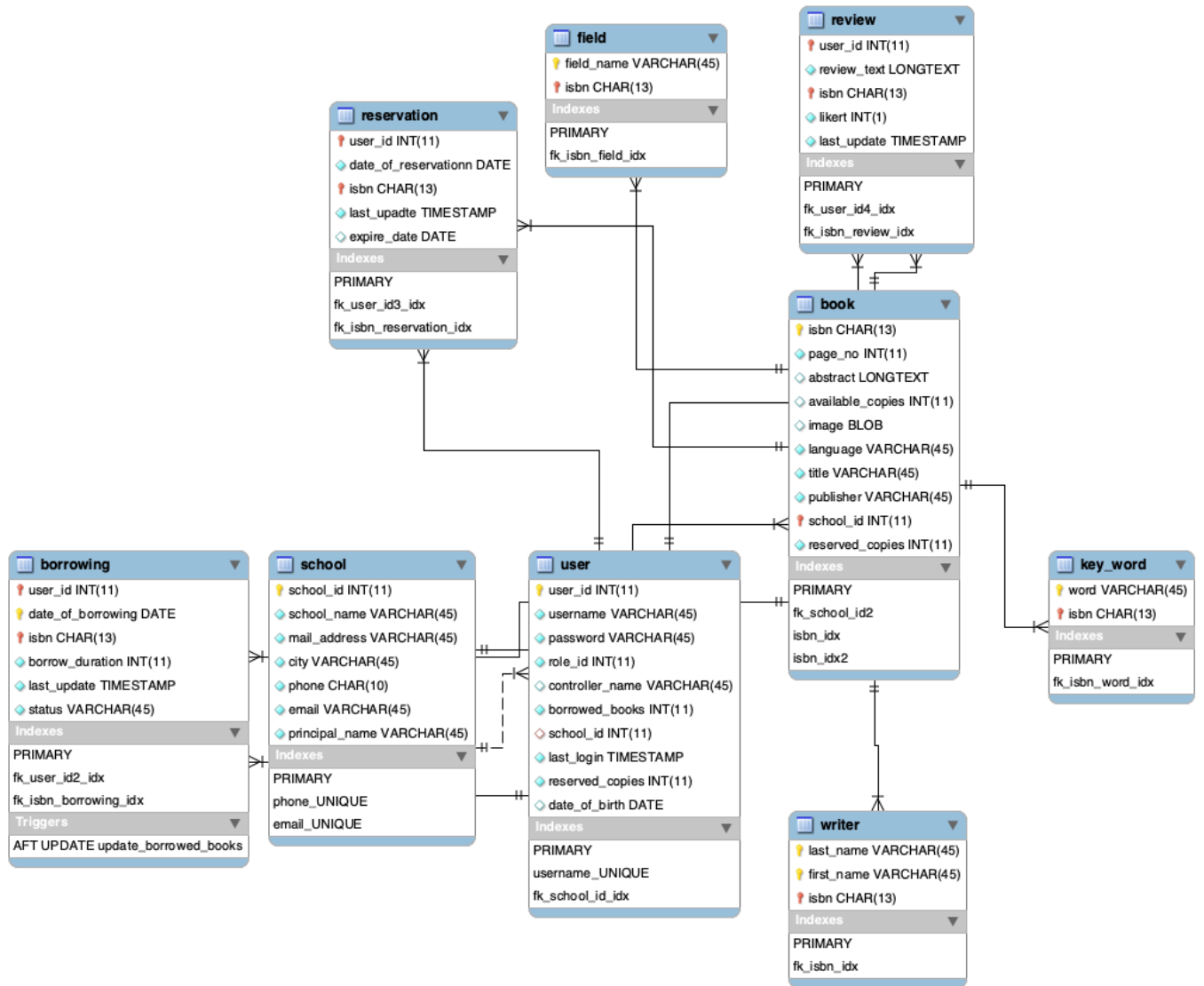- 2: Controller (of School Unit)

- 3: Teacher

- 4: Student

Books
Κάθε βιβλίο με ίδιο ISBN αλλά διαφορετικό school_id θεωρείται ως ξεχωριστή οντότητα.

Borrowing:
Κάθε δανεισμός με ίδιο user_id, isbn αλλά διαφορετική ημερομηνία θεωρείται διαφορετική οντότητα.

Κεντρικός Διαχειριστής
- User_ID
- Username
- Password
- role_id
- controller_name
- borrowed_books
- school_id
- last_login
- reserved_copies
- date_of_birth
- first_name
- last_name
- status

Χρήστης
- User_ID
- Username
- Password
- role_id
- controller_name
- borrowed_books
- school_id
- last_login
- reserved_copies
- date_of_birth
- first_name
- last_name
- status

Χειριστής
- User_ID
- Username
- Password
- role_id
- controller_name
- borrowed_books
- school_id
- last_login
- reserved_copies
- date_of_birth
- first_name
- last_name
- status

Σχολική Μονάδα
- School ID
- Ονομασία Σχολείου
- Ταχυδρομική Διεύθυνση
- Πόλη
- Τηλέφωνο
- email
- Ονοματεπώνυμο Διευθυντή

Βιβλίο
- Book ID
- Τίτλος
- Εκδότης
- ISBN
- (Συγγραφέας)
- Αριθμός Σελίδων
- Περίληψη
- Διαθέσιμα Αντίτυπα
- Εικόνα
- {Θεματική Κατηγορία}
- Γλώσσα
- {Λέξη Κλειδί}
- school_id

Low Level Χρήστες

Καθηγητές
- User_ID
- Username
- Password
- role_id
- controller_name
- borrowed_books
- school_id
- last_login
- reserved_copies
- date_of_birth
- first_name
- last_name
- status

Μαθητές
- User_ID
- Username
- Password
- role_id
- controller_name
- borrowed_books
- school_id
- last_login
- reserved_copies
- date_of_birth
- first_name
- last_name
- status

Relationships / labels: Καταχωρεί στοιχεία, Εγκρίνει, Χειρίζεται, Ιδιοκτησία, Αξιολογεί, Ανήκει, Κράτηση, Δανείζεται, Διαχειρίζεται, is a

Ημερομηνία Κράτησης, Ημερομηνία Δανεισμού

Σχήμα 1.1: Entity-Relation Diagram (ER)

Σχήμα 1.2: Relational Diagram

1.2 DDL & DML scripts

Listing 1.1: **library_schem.sql**

```
1  -- phpMyAdmin SQL Dump
2  -- version 5.2.0
3  -- https://www.phpmyadmin.net/
4  --
5  -- Host: localhost:8889
6  -- Generation Time: Jun 03, 2023 at 03:08 PM
7  -- Server version: 5.7.39
8  -- PHP Version: 8.2.0
9
10 SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
11 START TRANSACTION;
12 SET time_zone = "+00:00";
13
14
15 /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
16 /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
17 /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
18 /*!40101 SET NAMES utf8mb4 */;
19
20 --
21 -- Database: 'library'
22 --
23
24 -- _____
25
26 --
27 -- Table structure for table 'book'
28 --
29
30 CREATE TABLE 'book' (
31 'isbn' char(13) NOT NULL,
32 'page_no' int(11) NOT NULL COMMENT 'Range_1_to_5000',
33 'abstract' longtext,
34 'available_copies' int(11) DEFAULT NULL,
35 'image' blob,
36 'language' varchar(45) NOT NULL,
37 'title' varchar(45) NOT NULL,
38 'publisher' varchar(45) NOT NULL,
39 'school_id' int(11) NOT NULL,
40 'reserved_copies' int(11) NOT NULL DEFAULT '0'
41 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
42
43 -- _____
44
45 --
```

6

```
46  ── Table structure for table 'borrowing'
47  ──
48
49  CREATE TABLE 'borrowing' (
50  'user_id' int(11) NOT NULL,
51  'date_of_borrowing' date NOT NULL,
52  'isbn' char(13) NOT NULL,
53  'borrow_duration' int(11) NOT NULL,
54  'last_update' timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP
55  ON UPDATE CURRENT_TIMESTAMP,
56  'status' varchar(45) NOT NULL DEFAULT 'active',
57  'activation' varchar(45) NOT NULL DEFAULT 'disabled'
58  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
59
60  ──
61  ── Triggers 'borrowing'
62  ──
63  DELIMITER $$
64  CREATE TRIGGER 'update_borrowed_books'
65  AFTER UPDATE ON 'borrowing' FOR EACH ROW BEGIN
66  UPDATE user
67  SET borrowed_books = (SELECT COUNT(*) FROM borrowing
68  WHERE user_id = NEW.user_id)
69  WHERE user_id = NEW.user_id;
70  END
71  $$
72  DELIMITER ;
73
74  ── ────────────────────────────────────────────────
75
76  ──
77  ── Table structure for table 'field'
78  ──
79
80  CREATE TABLE 'field' (
81  'field_name' varchar(45) NOT NULL,
82  'isbn' char(13) NOT NULL
83  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
84
85  ── ────────────────────────────────────────────────
86
87  ──
88  ── Table structure for table 'key_word'
89  ──
90
91  CREATE TABLE 'key_word' (
92  'word' varchar(45) NOT NULL,
93  'isbn' char(13) NOT NULL
94  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
```

```
95
96  -- ————————————————————————————————————————————————
97
98  --
99  -- Table structure for table 'reservation'
100 --
101
102 CREATE TABLE 'reservation' (
103   'user_id' int(11) NOT NULL,
104   'date_of_reservation' date NOT NULL,
105   'isbn' char(13) NOT NULL,
106   'last_update' timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP
107 ON UPDATE CURRENT_TIMESTAMP,
108   'expire_date' date DEFAULT NULL,
109   'activation' varchar(45) NOT NULL DEFAULT 'disabled'
110 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
111
112 -- ————————————————————————————————————————————————
113
114 --
115 -- Table structure for table 'review'
116 --
117
118 CREATE TABLE 'review' (
119   'user_id' int(11) NOT NULL,
120   'review_text' longtext NOT NULL,
121   'isbn' char(13) NOT NULL,
122   'likert' int(1) NOT NULL,
123   'last_update' timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP
124 ON UPDATE CURRENT_TIMESTAMP
125 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
126
127 -- ————————————————————————————————————————————————
128
129 --
130 -- Table structure for table 'school'
131 --
132
133 CREATE TABLE 'school' (
134   'school_id' int(11) NOT NULL,
135   'school_name' varchar(45) NOT NULL,
136   'mail_address' varchar(45) NOT NULL,
137   'city' varchar(45) NOT NULL,
138   'phone' char(10) NOT NULL,
139   'email' varchar(45) NOT NULL,
140   'principal_name' varchar(45) NOT NULL
141 ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
142
143 -- ————————————————————————————————————————————————
```

```
144
145  --
146  -- Table structure for table `user`
147  --
148
149  CREATE TABLE `user` (
150  `user_id` int(11) NOT NULL,
151  `username` varchar(45) NOT NULL,
152  `password` varchar(45) NOT NULL,
153  `role_id` int(11) NOT NULL,
154  `controller_name` varchar(45) DEFAULT NULL,
155  `borrowed_books` int(11) NOT NULL DEFAULT '0',
156  `school_id` int(11) DEFAULT NULL,
157  `last_login` timestamp NOT NULL DEFAULT CURRENT_TIMESTAMP
158  ON UPDATE CURRENT_TIMESTAMP,
159  `reserved_copies` int(11) NOT NULL DEFAULT '0',
160  `date_of_birth` date DEFAULT NULL,
161  `first_name` varchar(45) DEFAULT NULL,
162  `last_name` varchar(45) DEFAULT NULL,
163  `status` varchar(45) NOT NULL DEFAULT 'disabled'
164  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
165
166  -- --------------------------------------------------------
167
168  --
169  -- Table structure for table `writer`
170  --
171
172  CREATE TABLE `writer` (
173  `last_name` varchar(45) NOT NULL,
174  `first_name` varchar(45) NOT NULL,
175  `isbn` char(13) NOT NULL
176  ) ENGINE=InnoDB DEFAULT CHARSET=utf8mb4;
177
178  --
179  -- Indexes for dumped tables
180  --
181
182  --
183  -- Indexes for table `book`
184  --
185  ALTER TABLE `book`
186  ADD PRIMARY KEY (`isbn`,`school_id`),
187  ADD KEY `fk_school_id2` (`school_id`),
188  ADD KEY `isbn_idx` (`isbn`),
189  ADD KEY `isbn_idx2` (`isbn`);
190
191  --
192  -- Indexes for table `borrowing`
```

9

```
193  --
194  ALTER TABLE `borrowing`
195  ADD PRIMARY KEY (`user_id`,`isbn`,`date_of_borrowing`),
196  ADD KEY `fk_user_id2_idx` (`user_id`),
197  ADD KEY `fk_isbn_borrowing_idx` (`isbn`);
198
199  --
200  -- Indexes for table `field`
201  --
202  ALTER TABLE `field`
203  ADD PRIMARY KEY (`field_name`,`isbn`),
204  ADD KEY `fk_isbn_field_idx` (`isbn`);
205
206  --
207  -- Indexes for table `key_word`
208  --
209  ALTER TABLE `key_word`
210  ADD PRIMARY KEY (`word`,`isbn`),
211  ADD KEY `fk_isbn_word_idx` (`isbn`);
212
213  --
214  -- Indexes for table `reservation`
215  --
216  ALTER TABLE `reservation`
217  ADD PRIMARY KEY (`user_id`,`isbn`),
218  ADD KEY `fk_user_id3_idx` (`user_id`),
219  ADD KEY `fk_isbn_reservation_idx` (`isbn`);
220
221  --
222  -- Indexes for table `review`
223  --
224  ALTER TABLE `review`
225  ADD PRIMARY KEY (`user_id`,`isbn`),
226  ADD KEY `fk_user_id4_idx` (`user_id`),
227  ADD KEY `fk_isbn_review_idx` (`isbn`);
228
229  --
230  -- Indexes for table `school`
231  --
232  ALTER TABLE `school`
233  ADD PRIMARY KEY (`school_id`),
234  ADD UNIQUE KEY `phone_UNIQUE` (`phone`),
235  ADD UNIQUE KEY `email_UNIQUE` (`email`);
236
237  --
238  -- Indexes for table `user`
239  --
240  ALTER TABLE `user`
241  ADD PRIMARY KEY (`user_id`),
```

```sql
242  ADD UNIQUE KEY `username_UNIQUE` (`username`),
243  ADD KEY `fk_school_id_idx` (`school_id`);
244
245  --
246  -- Indexes for table `writer`
247  --
248  ALTER TABLE `writer`
249  ADD PRIMARY KEY (`first_name`,`last_name`,`isbn`),
250  ADD KEY `fk_isbn_idx` (`isbn`);
251
252  --
253  -- AUTO_INCREMENT for dumped tables
254  --
255
256  --
257  -- AUTO_INCREMENT for table `school`
258  --
259  ALTER TABLE `school`
260  MODIFY `school_id` int(11) NOT NULL AUTO_INCREMENT;
261
262  --
263  -- AUTO_INCREMENT for table `user`
264  --
265  ALTER TABLE `user`
266  MODIFY `user_id` int(11) NOT NULL AUTO_INCREMENT;
267
268  --
269  -- Constraints for dumped tables
270  --
271
272  --
273  -- Constraints for table `book`
274  --
275  ALTER TABLE `book`
276  ADD CONSTRAINT `fk_school_id2` FOREIGN KEY (`school_id`)
277  REFERENCES `school` (`school_id`);
278
279  --
280  -- Constraints for table `borrowing`
281  --
282  ALTER TABLE `borrowing`
283  ADD CONSTRAINT `fk_isbn_borrowing` FOREIGN KEY (`isbn`)
284  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION,
285  ADD CONSTRAINT `fk_user_id2` FOREIGN KEY (`user_id`)
286  REFERENCES `user` (`user_id`) ON DELETE NO ACTION ON UPDATE NO ACTION;
287
288  --
289  -- Constraints for table `field`
290  --
```

```
291  ALTER TABLE `field`
292  ADD CONSTRAINT `fk_isbn_field` FOREIGN KEY (`isbn`)
293  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION;
294
295  --
296  -- Constraints for table `key_word`
297  --
298  ALTER TABLE `key_word`
299  ADD CONSTRAINT `fk_isbn_word` FOREIGN KEY (`isbn`)
300  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION;
301
302  --
303  -- Constraints for table `reservation`
304  --
305  ALTER TABLE `reservation`
306  ADD CONSTRAINT `fk_isbn_reservation` FOREIGN KEY (`isbn`)
307  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION,
308  ADD CONSTRAINT `fk_user_reservation` FOREIGN KEY (`user_id`)
309  REFERENCES `user` (`user_id`) ON DELETE NO ACTION ON UPDATE NO ACTION;
310
311  --
312  -- Constraints for table `review`
313  --
314  ALTER TABLE `review`
315  ADD CONSTRAINT `fk_isbn_review` FOREIGN KEY (`isbn`)
316  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION,
317  ADD CONSTRAINT `fk_user_review` FOREIGN KEY (`user_id`)
318  REFERENCES `user` (`user_id`) ON DELETE NO ACTION ON UPDATE NO ACTION;
319
320  --
321  -- Constraints for table `user`
322  --
323  ALTER TABLE `user`
324  ADD CONSTRAINT `fk_school_id` FOREIGN KEY (`school_id`)
325  REFERENCES `school` (`school_id`) ON DELETE NO ACTION ON UPDATE NO
326  ACTION;
327
328  --
329  -- Constraints for table `writer`
330  --
331  ALTER TABLE `writer`
332  ADD CONSTRAINT `fk_isbn_writer` FOREIGN KEY (`isbn`)
333  REFERENCES `book` (`isbn`) ON DELETE NO ACTION ON UPDATE NO ACTION;
334  COMMIT;
335
336  /*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
337  /*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
338  /*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

Listing 1.2: **library_insert_data.sql**

```
1   -- phpMyAdmin SQL Dump
2   -- version 5.2.0
3   -- https://www.phpmyadmin.net/
4   --
5   -- Host: localhost:8889
6   -- Generation Time: Jun 03, 2023 at 03:09 PM
7   -- Server version: 5.7.39
8   -- PHP Version: 8.2.0
9
10  SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO";
11  START TRANSACTION;
12  SET time_zone = "+00:00";
13
14
15  /*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
16  /*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
17  /*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
18  /*!40101 SET NAMES utf8mb4 */;
19
20  --
21  -- Database: 'library'
22  --
23
24  --
25  -- Dumping data for table 'book'
26  --
27
28  INSERT INTO 'book' ('isbn', 'page_no', 'abstract', 'available_copies'
29  , 'image', 'language', 'title', 'publisher', 'school_id',
30  'reserved_copies')
31  VALUES
32  ('8781236784503', 542, 'An_exhilarating_adventure', 7,
33  NULL, 'English', 'The_Lost_Island', 'HarperCollins', 1, 0),
34  ('8781236784503', 542, 'An_exhilarating_adventure', 7,
35  NULL, 'English', 'The_Lost_Island', 'HarperCollins', 2, 7),
36  ('8781236784504', 289, 'A_mysterious_journey_awaits', 6,
37  NULL, 'English', 'Silent_Witness', 'Simon_&_Schuster', 2, 0),
38  ('8781236784504', 289, 'A_mysterious_journey_awaits', 8,
39  NULL, 'English', 'Silent_Witness', 'Simon_&_Schuster', 3, 1),
40  ('8781236784505', 405, 'A_tale_of_love_and_passion', 1,
41  NULL, 'English', 'Love_in_the_Air', 'Riverhead_Books', 1, 0),
42  ('8781236784505', 405, 'A_tale_of_love_and_passion', 9,
43  NULL, 'English', 'Love_in_the_Air', 'Riverhead_Books', 3, 0),
44  ('8781236784506', 176, 'A_gripping_and_thrilling_suspense', 7,
45  NULL, 'English', 'Dark_Secrets', 'Picador', 1, 4),
46  ('8781236784506', 176, 'A_gripping_and_thrilling_suspense', 11,
47  NULL, 'English', 'Dark_Secrets', 'Picador', 2, 0),
48  ('8781236784507', 512, 'An_epic_historical_saga', 5,
```

```
49  NULL, 'English', 'The_Odyssey', 'Penguin_Classics', 2, 0),
50  ('8781236784507', 512, 'An_epic_historical_saga', 6,
51  NULL, 'English', 'The_Odyssey', 'Penguin_Classics', 3, 0),
52  ('8781236784508', 418, 'Enter_a_magical_realm_of_fantasy', 5,
53  NULL, 'English', 'The_Chronicles_of_Narnia', 'HarperCollins', 1, 0),
54  ('8781236784508', 418, 'Enter_a_magical_realm_of_fantasy', 8,
55  NULL, 'English', 'The_Chronicles_of_Narnia', 'HarperCollins', 2, 0),
56  ('8781236784509', 328, 'Classic_literature_that_captivates', 8,
57  NULL, 'English', 'Pride_and_Prejudice', 'Penguin_Classics', 1, 0),
58  ('8781236784509', 328, 'Classic_literature_that_captivates', 12,
59  NULL, 'English', 'Pride_and_Prejudice', 'Penguin_Classics', 3, 0),
60  ('8781236784510', 214, 'Una_emocionante_aventura', 6,
61  NULL, 'Spanish', 'La_Isla_Perdida', 'HarperCollins', 2, 0),
62  ('8781236784510', 214, 'Una_emocionante_aventura', 8,
63  NULL, 'Spanish', 'La_Isla_Perdida', 'HarperCollins', 3, 0),
64  ('8781236784511', 384, 'Un_viaje_misterioso', 5,
65  NULL, 'Spanish', 'Testigo_Silencioso', 'Simon_&_Schuster', 1, 0),
66  ('8781236784511', 384, 'Un_viaje_misterioso', 9,
67  NULL, 'Spanish', 'Testigo_Silencioso', 'Simon_&_Schuster', 3, 0),
68  ('8781236784512', 320, 'Una_historia_de_amor_y_romance', 3,
69  NULL, 'Spanish', 'Amor_en_el_Aire', 'Riverhead_Books', 1, 0),
70  ('8781236784512', 320, 'Una_historia_de_amor_y_romance', 5,
71  NULL, 'Spanish', 'Amor_en_el_Aire', 'Riverhead_Books', 2, 0),
72  ('8781236784513', 240, 'Un_emocionante_thriller', 6,
73  NULL, 'Spanish', 'Secretos_Oscuros', 'Picador', 2, 0),
74  ('8781236784513', 240, 'Un_emocionante_thriller', 8,
75  NULL, 'Spanish', 'Secretos_Oscuros', 'Picador', 3, 1),
76  ('8781236784514', 448, 'Una_conmovedora_historia_de_vida', 9,
77  NULL, 'Spanish', 'El_Diario_de_un_Joven', 'Anchor_Books', 3, 0),
78  ('8781236784515', 224, 'Laugh_out_loud_with_this_humorous_tale', 3,
79   NULL, 'English', 'Catch−22', 'Dell_Publishing', 1, 0),
80  ('8781236784516', 672, 'An_epic_historical_romance', 7,
81  NULL, 'English', 'Gone_with_the_Wind', 'Scribner', 2, 0),
82  ('8781236784517', 384, 'A_fascinating_scientific_exploration', 8,
83  NULL, 'English', 'The_Immortal_Life_of_Henrietta_Lacks',
84  'Broadway_Books', 3, 0), ('8781236784518', 336,
85  'A_mind−bending_psychological_thriller', 7,
86  NULL, 'English', 'Gone_Girl', 'Anchor_Books', 1, 0),
87  ('8781236784519', 400, 'A_thought−provoking_contemporary_novel', 6,
88  NULL, 'English', 'The_Alchemist', 'HarperOne', 2, 0),
89  ('8781236784520', 512, 'A_dystopian_world_of_suspense', 10,
90  NULL, 'English', '1984', 'Signet_Classics', 3, 0),
91  ('8781236784521', 304, 'Uncover_the_secrets_with_this
92  suspenseful_journey', 3, NULL, 'English', 'The_Da_Vinci_Code',
93  'Doubleday', 1, 0),
94  ('8781236784522', 736, 'Embark_on_a_thrilling_adventure', 7,
95  NULL, 'English', 'The_Hobbit', 'Houghton_Mifflin', 2, 0),
96  ('8781236784523', 288, 'Un_roman_captivant', 8,
97  NULL, 'French', 'L\'  tranger  ',_'Gallimard',_3,_0),
```

```
 98 │ ('8781236784524', 432, 'Une histoire d\'amour inoubliable', 3,
 99 │NULL, 'French', 'Le Petit Prince', 'Gallimard', 1, 0),
100 │('8781236784525', 360, 'Un voyage  pique    travers le temps', 8,
101 │NULL, 'French', 'Les Mis rables', 'Penguin Classics', 2, 0),
102 │('8781236784526', 496, 'Un roman historique captivant', 9,
103 │ NULL, 'French', 'Germinal', 'Gallimard', 3, 0),
104 │('8781236784527', 288, 'Una commovente storia di vita', 4,
105 │NULL, 'Italian', 'La Vita   Bella', 'Mondadori', 1, 0),
106 │('8781236784528', 336, 'Un romanzo di formazione', 9,
107 │NULL, 'Italian', 'Il Gattopardo', 'Mondadori', 2, 0),
108 │('8781236784529', 432, 'Una storia di amicizia e avventura',
109 │8, NULL, 'Italian', 'Le Avventure di Pinocchio', 'Feltrinelli',
110 │3, 0),
111 │('8781236784530', 208, 'Eine aufregende Reise', 6,
112 │NULL, 'German', 'Die Verwandlung', 'Fischer Verlag', 1, 1),
113 │('8781236784531', 384, 'Ein packender Krimi', 7, NULL,
114 │'German', 'Der Name der Rose', 'Bastei L bbe', 2, 0),
115 │('8781236784532', 512, 'Ein historischer Roman voller Intrigen',
116 │8, NULL, 'German', 'Die P pstin', 'L bbe', 3, 0),
117 │('8781236784533', 432, 'Uma aventura emocionante', 5,
118 │NULL, 'Portuguese', 'A Viagem do Elefante', 'Caminho', 1, 0),
119 │('8781236784534', 320, 'Uma hist ria de amor e supera o', 5,
120 │NULL, 'Portuguese', 'Memorial do Convento', 'Caminho', 2, 0),
121 │('8781236784535', 416, 'Um cl ssico da literatura universal', 12,
122 │NULL, 'Portuguese', 'Dom Casmurro', 'Companhia das Letras', 3, 0),
123 │('8781236784536', 32, 'Nikos Tests!', 5, NULL, 'Greek', 'Zorbas',
124 │'Norstedts F rlag', 1, 0),
125 │('8781236784537', 368, 'En f ngslande deckare', 6, NULL,
126 │'Swedish', 'H xan', 'Albert Bonniers F rlag', 2, 0),
127 │('8781236784538', 192, 'En roman om k rlek och l ngtan', 10,
128 │ NULL, 'Swedish', 'Kvinnan p  t get', 'Natur & Kultur', 3, 0),
129 │('8781236784539', 432, 'Eine bewegende Liebesgeschichte', 3,
130 │NULL, 'German', 'Der Vorleser', 'Diogenes Verlag', 1, 0),
131 │('8781236784540', 304, 'Ein philosophischer Roman', 6,
132 │NULL, 'German', 'Siddhartha', 'Suhrkamp Verlag', 2, 0),
133 │('8781236784541', 480, 'Ein historischer Roman voller Dramatik', 9,
134 │NULL, 'German', 'Der Medicus', 'Bastei L bbe', 3, 0),
135 │('8781236784542', 352, 'Unavventura mozzafiato', 7, NULL, 'Italian',
136 │ 'Il Codice Da Vinci', 'Mondadori', 1, 0),
137 │('8781236784543', 416, 'Un romanzo storico ricco di intrighi', 6,
138 │NULL, 'Italian', 'I Promessi Sposi', 'Garzanti', 2, 0),
139 │('8781236784544', 288, 'Una storia di amicizia e avventura',
140 │10, NULL,
141 │'Italian', 'Le Cronache di Narnia', 'Mondadori', 3, 0),
142 │('8781236784545', 368, 'Un roman captivant', 1, NULL, 'French',
143 │'Le Comte de Monte—Cristo', 'Le Livre de Poche', 1, 0),
144 │('8781236784546', 416, 'Une histoire d\'amour et de passion', 5,
145 │NULL, 'French', 'Les Fleurs du Mal', 'GF Flammarion', 2, 0),
146 │('8781236784547', 352, 'Un roman policier palpitant', 6,
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147 |NULL, 'French', 'L\' cume des Jours', 'Gallimard', 3, 0),
148 |('8781236784548', 400, 'Una historia de amor inolvidable', 4,
149 |NULL, 'Spanish', 'Cien a os de soledad', 'Diana', 1, 0),
150 |('8781236784549', 288, 'Una novela hist rica apasionante', 6,
151 |NULL, 'Spanish', 'El Capit n Alatriste', 'Alfaguara', 2, 0),
152 |('8781236784550', 432, 'Una obra maestra de la literatura', 10,
153 |NULL, 'Spanish', 'Don Quijote de la Mancha', 'Penguin Cl sicos',
154 |3, 0),
155 |('8781236784551', 304, 'A captivating coming-of-age story', 7,
156 |NULL, 'English', 'The Catcher in the Rye',
157 |'Little, Brown and Company', 1, 0),
158 |('8781236784552', 432, 'A heartwarming tale of family bonds', 7,
159 |NULL, 'English', 'To Kill a Mockingbird', 'HarperCollins', 2, 0),
160 |('8781236784553', 256, 'An inspirational self-help book', 8,
161 |NULL, 'English', 'The Power of Now', 'New World Library', 3, 1),
162 |('8781236784554', 320, 'Un roman poignant sur l\'amour et la perte',
163 |6, NULL, 'French', 'L\'Amant', 'Minuit', 1, 0),
164 |('8781236784555', 384, 'Un r cit historique captivant', 5, NULL,
165 |'French', 'Les Rois Maudits', 'Plon', 2, 0),
166 |('8781236784556', 272, 'Une com die romantique hilarante', 9,
167 |NULL, 'French', 'Le Bonheur des Dames', 'Charpentier', 3, 0),
168 |('8781236784557', 416, 'Una historia de superaci n personal', 4,
169 |NULL, 'Spanish', 'El Alquimista', 'Rayo', 1, 0),
170 |('8781236784558', 288, 'Un cl sico de la literatura latinoamericana',
171 |7, NULL, 'Spanish', 'Cien a os de soledad', 'Sudamericana', 2, 0),
172 |('8781236784559', 352, 'Una novela pica y emocionante', 8, NULL,
173 |'Spanish', 'El Se or de los Anillos', 'Minotauro', 3, 0),
174 |('8781236784560', 384, 'En sp nnande k rlekshistoria', 7, NULL,
175 |'Swedish', 'Pippi L ngstrump', 'Rab n & Sj gren', 1, 0),
176 |('8781236784561', 208, 'En fantasifull ber ttelse f r barn', 8,
177 |NULL, 'Swedish', 'Mio, min Mio', 'Rab n & Sj gren', 2, 0),
178 |('8781236784562', 320, 'En inspirerande sj lvhj lpsbok', 9, NULL,
179 |'Swedish', 'Att vara n gon', 'Norstedts', 3, 0),
180 |('8781236784563', 416, 'Un viaggio nel mondo dell\'arte', 5,
181 |NULL, 'Italian', 'La Divina Commedia', 'Mondadori', 1, 0),
182 |('8781236784564', 320, 'Una storia di amicizia e avventura', 6,
183 |NULL, 'Italian', 'Le Avventure di Tom Sawyer', 'Mondadori', 2, 0),
184 |('8781236784565', 480, 'Una commedia classica intramontabile', 10,
185 |NULL, 'Italian', 'La Mandragola', 'Biblioteca Universale Rizzoli',
186 |3, 0),
187 |('8781236784566', 384, 'Ein magisches Abenteuer', 7, NULL, 'German',
188 |'Harry Potter und der Stein der Weisen', 'Carlsen', 1, 0),
189 |('8781236784567', 512, 'Ein packender Thriller', 6, NULL, 'German',
190 |'Das Schweigen der L mmer', 'Heyne', 2, 0),
191 |('8781236784568', 320, 'Eine herzerw rmende Liebesgeschichte', 9,
192 |NULL, 'German', 'Gut gegen Nordwind', 'Rowohlt', 3, 0),
193 |('8781236784569', 352, 'Uma hist ria emocionante sobre fam lia e
194 |coragem',
195 |4, NULL, 'Portuguese', 'Ensaio sobre a Cegueira', 'Companhia
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196  das Letras',␣1,␣0),
197  ('8781236784570',␣416,␣'Um romance hist rico cheio de mist rio',␣5,
198  NULL,␣'Portuguese',␣'Os Maias',␣'Porto Editora',␣2,␣0),
199  ('8781236784571',␣288,␣'Uma com dia rom ntica divertida',␣9,
200  NULL,␣'Portuguese',␣'Bridget Jones\'s␣Diary', 'Civiliza  o␣Editora',
201  3, 0),
202  ('8781236784572', 304, 'A␣gripping␣psychological␣thriller', 6,
203  NULL, 'English', 'Gone␣Girl', 'Crown␣Publishing', 1, 0),
204  ('8781236784573', 432, 'A␣heart−wrenching␣tale␣of␣love␣and␣loss',
205   7, NULL, 'English', 'The␣Kite␣Runner', 'Riverhead␣Books', 2, 0),
206  ('8781236784574', 256, 'A␣thought−provoking␣science␣fiction␣novel',
207  8, NULL, 'English', '1984', 'Signet␣Classics', 3, 0),
208  ('8781236784575', 368, 'Une␣enqu te␣captivante', 6,
209  NULL, 'French', 'Le␣Chien␣des␣Baskerville', 'Le␣Livre␣de␣Poche',
210  1, 0),
211  ('8781236784576', 400, 'Un␣roman␣historique␣passionnant',
212  6, NULL, 'French', 'Au␣Bonheur␣des␣Dames', 'Le␣Livre␣de␣Poche',
213   2, 0),
214  ('8781236784577', 352, 'Un␣thriller␣psychologique␣haletant',
215  9, NULL, 'French', 'Les␣Apparences', 'Le␣Livre␣de␣Poche', 3, 0),
216  ('8781236784578', 416, 'Una␣novela␣de␣suspense␣trepidante', 4,
217  NULL, 'Spanish', 'La␣Sombra␣del␣Viento', 'Planeta', 1, 0),
218  ('8781236784579', 288, 'Una␣historia␣llena␣de␣misterio␣y␣aventura',
219  7, NULL, 'Spanish', 'El␣C digo␣Da␣Vinci', 'Umbriel', 2, 0),
220  ('8781236784580', 432, 'Una␣novela␣hist rica␣ pica ', 10,
221  NULL, 'Spanish', 'Los␣Pilares␣de␣la␣Tierra', 'Debolsillo', 3, 0),
222  ('8781236784581', 384, 'En␣sp nnande␣deckarroman', 7,
223  NULL, 'Swedish', 'M n␣som␣hatar␣kvinnor', 'Norstedts␣F rlag', 1, 0),
224  ('8781236784582', 320, 'En␣f ngslande␣historisk␣ber ttelse',
225  8, NULL, 'Swedish', 'Victoria', 'Wahlstr m␣&␣Widstrand', 2, 0),
226  ('8781236784583', 432, 'En␣roman␣om␣k rlek␣och␣l ngtan',
227  9, NULL, 'Swedish', ' nglamakerskan ', 'Forum', 3, 0),
228  ('8781236784584', 384, 'Un␣romanzo␣avvincente', 4,
229  NULL, 'Italian', 'Inferno', 'Mondadori', 1, 0),
230  ('8781236784585', 432, 'Una␣storia␣di␣avventura␣e␣mistero', 5,
231  NULL, 'Italian', 'La␣Cattedrale␣del␣Mare', 'Mondadori', 2, 0),
232  ('8781236784586', 320, 'Un␣romanzo␣commovente␣sull\'amore e
233   la speranza',␣9,␣NULL,␣'Italian',␣'La solitudine dei numeri primi',
234  ␣'Mondadori',␣3,␣0),
235  ('8781236784587',␣416,␣'Ein packendes Drama',␣4,␣NULL,␣'German'
236  ,␣'Der Vorleser',␣'Diogenes',␣1,␣0),
237  ('8781236784588',␣288,␣'Ein philosophisches Meisterwerk',␣7,
238  NULL,␣'German',␣'Narzi  und Goldmund',␣'Suhrkamp',␣2,␣0),
239  ('8781236784589',␣352,␣'Ein historischer Roman voller Leidenschaft',
240  ␣8,␣NULL,␣'German',␣'Die S ulen der Erde',␣'Bastei L bbe',␣3,␣0),
241  ('8781236784590',␣320,␣'Uma hist ria de amor e suspense',␣6,
242  ␣NULL,␣'Portuguese',␣'Ensaio Sobre a Lucidez',␣'Caminho',␣1,␣0),
243  ('8781236784591',␣416,␣'Um romance hist rico fascinante',␣6,
244  ␣NULL,␣'Portuguese',␣'O Primo Bas lio',␣'Rel gio D\' gua ', 2, 0),
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  3, 0),
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('8781236784594', 432, 'A_thrilling_science_fiction_adventure',
7, NULL, 'English', 'Ender\'s Game',_'Tor Books',_2,_0),
('8781236784595',_256,_'A poignant tale of resilience',_8,
NULL,_'English',_'The Color Purple',_'Harvest Books',_3,_0),
('8781236784596',_368,_'Une histoire d\'amour_et_de_passion',
 6, NULL, 'French', 'Madame_Bovary', 'Le_Livre_de_Poche', 1, 0),
('8781236784597', 400, 'Un_roman_policier_palpitant', 6,
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-- Dumping data for table `borrowing`
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(4, '2023-05-20', '8781236784545', -1, '2023-05-28_11:42:41',
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-- Dumping data for table `field`
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('Romance', '8781236784507'),
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361   ('Travel', '8781236784543'),
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378   ('Religion', '8781236784560'),
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417  -- Dumping data for table `key_word`
418  --
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424  ('non-fiction', '8781236784504'),
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426  ('thriller', '8781236784505'),
427  ('love', '8781236784506'),
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433  ('adventure', '8781236784509'),
434  ('fantasy', '8781236784509'),
435  ('motivation', '8781236784510'),
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487  ('discoveries', '8781236784536'),
488  ('science', '8781236784536'),
489  ('historical', '8781236784537'),
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491  ('behavior', '8781236784538'),
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494  ('creativity', '8781236784539'),
495  ('education', '8781236784540'),
496  ('teaching', '8781236784540'),
497  ('inspiration', '8781236784541'),
498  ('self-help', '8781236784541'),
499  ('faith', '8781236784542'),
500  ('religion', '8781236784542'),
501  ('competition', '8781236784543'),
502  ('sports', '8781236784543'),
503  ('harmony', '8781236784544'),
504  ('music', '8781236784544'),
505  ('cooking', '8781236784545'),
506  ('culinary', '8781236784545'),
507  ('science_fiction', '8781236784546'),
508  ('space', '8781236784546'),
509  ('fantasy', '8781236784547'),
510  ('magic', '8781236784547'),
511  ('poetry', '8781236784548'),
512  ('rhyme', '8781236784548'),
513  ('business', '8781236784549'),
514  ('leadership', '8781236784549'),
515  ('health', '8781236784550'),
516  ('well-being', '8781236784550'),
517  ('digital', '8781236784551'),
518  ('technology', '8781236784551'),
519  ('culture', '8781236784552'),
520  ('history', '8781236784552'),
521  ('mindset', '8781236784553'),
522  ('psychology', '8781236784553'),
523  ('art', '8781236784554'),
524  ('sculpture', '8781236784554'),
525  ('journey', '8781236784555'),
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528  ('science', '8781236784556'),
529  ('fiction', '8781236784557'),
530  ('story', '8781236784557'),
531  ('business', '8781236784558'),
532  ('finance', '8781236784558'),
533  ('growth', '8781236784559'),
534  ('self-help', '8781236784559'),
535  ('religion', '8781236784560'),
536  ('spirituality', '8781236784560'),
537  ('athletics', '8781236784561'),
538  ('sports', '8781236784561'),
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539  ('history', '8781236784562'),
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543  ('nature', '8781236784564'),
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545  ('music', '8781236784565'),
546  ('rhythm', '8781236784565'),
547  ('art', '8781236784566'),
548  ('painting', '8781236784566'),
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550  ('wisdom', '8781236784567'),
551  ('behavior', '8781236784568'),
552  ('psychology', '8781236784568'),
553  ('future', '8781236784569'),
554  ('science_fiction', '8781236784569'),
555  ('adventure', '8781236784570'),
556  ('travel', '8781236784570'),
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558  ('recipes', '8781236784571'),
559  ('health', '8781236784572'),
560  ('nutrition', '8781236784572'),
561  ('fitness', '8781236784573'),
562  ('sports', '8781236784573'),
563  ('education', '8781236784574'),
564  ('learning', '8781236784574'),
565  ('historical', '8781236784575'),
566  ('history', '8781236784575'),
567  ('mind', '8781236784576'),
568  ('psychology', '8781236784576'),
569  ('faith', '8781236784577'),
570  ('religion', '8781236784577'),
571  ('digital', '8781236784578'),
572  ('technology', '8781236784578'),
573  ('art', '8781236784579'),
574  ('sculpture', '8781236784579'),
575  ('business', '8781236784580'),
576  ('entrepreneurship', '8781236784580'),
577  ('discoveries', '8781236784581'),
578  ('science', '8781236784581'),
579  ('fiction', '8781236784582'),
580  ('story', '8781236784582'),
581  ('journey', '8781236784583'),
582  ('travel', '8781236784583'),
583  ('motivation', '8781236784584'),
584  ('self-help', '8781236784584'),
585  ('religion', '8781236784585'),
586  ('spirituality', '8781236784585'),
587  ('athletics', '8781236784586'),
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588   ('sports', '8781236784586'),
589   ('history', '8781236784587'),
590   ('war', '8781236784587'),
591   ('innovation', '8781236784588'),
592   ('technology', '8781236784588'),
593   ('nature', '8781236784589'),
594   ('wildlife', '8781236784589'),
595   ('music', '8781236784590'),
596   ('rhythm', '8781236784590'),
597   ('art', '8781236784591'),
598   ('painting', '8781236784591'),
599   ('philosophy', '8781236784592'),
600   ('wisdom', '8781236784592'),
601   ('behavior', '8781236784593'),
602   ('psychology', '8781236784593'),
603   ('faith', '8781236784594'),
604   ('religion', '8781236784594'),
605   ('digital', '8781236784595'),
606   ('technology', '8781236784595'),
607   ('art', '8781236784596'),
608   ('sculpture', '8781236784596'),
609   ('discoveries', '8781236784597'),
610   ('science', '8781236784597');
611
612   --
613   -- Dumping data for table `reservation`
614   --
615
616   INSERT INTO `reservation` (`user_id`, `date_of_reservation`,
617   `isbn`, `last_update`, `expire_date`, `activation`)
618   VALUES
619   (4, '2023-05-30', '8781236784506', '2023-06-01 13:35:50',
620   '2023-06-06', 'enabled'),
621   (15, '2023-06-01', '8781236784513', '2023-06-01 11:36:03',
622   '2023-06-08', 'disabled'),
623   (15, '2023-06-01', '8781236784553', '2023-06-01 11:35:54',
624   '2023-06-08', 'disabled'),
625   (16, '2023-06-01', '8781236784530', '2023-06-01 11:38:24',
626   '2023-06-08', 'disabled');
627
628   --
629   -- Dumping data for table `review`
630   --
631
632   INSERT INTO `review` (`user_id`, `review_text`, `isbn`, `likert`,
633   `last_update`) VALUES
634   (1, 'Great book!', '8781236784503', 5, '2023-05-22 14:45:27'),
635   (1, 'Interesting read', '8781236784504', 4, '2023-05-22 14:45:27'),
636   (1, 'Nice book!', '8781236784505', 4, '2023-06-02 10:38:21'),
```

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637  (1, 'Great', '8781236784506', 4, '2023-06-02 10:41:36'),
638  (2, 'Loved it!', '8781236784503', 4, '2023-05-22 14:45:27'),
639  (2, 'Not my cup of tea', '8781236784504', 2, '2023-05-22 14:45:27'),
640  (3, 'Could be better', '8781236784503', 3, '2023-05-22 14:45:27'),
641  (3, 'Highly recommended', '8781236784504', 5, '2023-05-22 14:45:27'),
642  (4, 'Page-turner', '8781236784505', 5, '2023-05-22 14:45:27'),
643  (5, 'Average book', '8781236784505', 3, '2023-05-22 14:45:27'),
644  (6, 'Disappointing', '8781236784505', 2, '2023-05-22 14:45:27'),
645  (7, 'Must-read!', '8781236784506', 5, '2023-05-22 14:45:27'),
646  (8, 'Enjoyable', '8781236784506', 4, '2023-05-22 14:45:27'),
647  (9, 'Waste of time', '8781236784506', 1, '2023-05-22 14:45:27'),
648  (10, 'Well-written', '8781236784507', 4, '2023-05-22 14:45:27'),
649  (11, 'Thought-provoking', '8781236784507', 5, '2023-05-22 14:45:27'),
650  (12, 'Not recommended', '8781236784507', 2, '2023-05-22 14:45:27'),
651  (13, 'Captivating story', '8781236784508', 5, '2023-05-22 14:45:27'),
652  (14, 'Decent book', '8781236784508', 3, '2023-05-22 14:45:27'),
653  (15, 'Couldn not put it down!', '8781236784508', 5, '2023-05-22
654  14:45:27'),
655  (16, 'Intriguing plot', '8781236784509', 4, '2023-05-22 14:45:27'),
656  (17, 'Meh', '8781236784509', 2, '2023-05-22 14:45:27'),
657  (18, 'Good read', '8781236784509', 3, '2023-05-22 14:45:27'),
658  (19, 'Unforgettable', '8781236784510', 5, '2023-05-22 14:45:27'),
659  (20, 'Mediocre at best', '8781236784510', 3, '2023-05-22 14:45:27'),
660  (21, 'Not my genre', '8781236784510', 2, '2023-05-22 14:45:27'),
661  (22, 'Engaging characters', '8781236784511', 4,
662   '2023-05-22 14:45:27'),
663  (23, 'Did not meet my expectations', '8781236784511', 2,
664  '2023-05-22 14:45:27'),
665  (24, 'Highly entertaining', '8781236784511', 5,
666  '2023-05-22 14:45:27'),
667  (25, 'Compelling narrative', '8781236784512', 5,
668  '2023-05-22 14:45:27'),
669  (26, 'A bit slow-paced', '8781236784512', 3, '2023-05-22 14:45:27'),
670  (27, 'Gripping till the end', '8781236784512', 4,
671  '2023-05-22 14:45:27'),
672  (28, 'Couldn not get into it', '8781236784513', 2,
673   '2023-05-22 14:45:27'),
674  (29, 'Well-crafted story', '8781236784513', 4,
675   '2023-05-22 14:45:27'),
676  (30, 'Disappointed', '8781236784513', 2, '2023-05-22 14:45:27'),
677  (31, 'A masterpiece', '8781236784514', 5, '2023-05-22 14:45:27'),
678  (32, 'Not worth the hype', '8781236784514', 3,
679  '2023-05-22 14:45:27'),
680  (33, 'Couldn not stop reading', '8781236784514', 5, '2023-05-22
681  14:45:27'),
682  (34, 'Unexpected twist', '8781236784515', 4, '2023-05-22 14:45:27'),
683  (35, 'Didn not enjoy it', '8781236784515', 2, '2023-05-22 14:45:27'),
684  (36, 'Good book for a rainy day', '8781236784515', 3, '2023-05-22
685  14:45:27'),
```

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(37, 'Riveting', '8781236784516', 5, '2023−05−22 14:45:27'),
(38, 'Just okay', '8781236784516', 3, '2023−05−22 14:45:27'),
(39, 'A letdown', '8781236784516', 2, '2023−05−22 14:45:27'),
(40, 'Highly recommended', '8781236784517', 5,
'2023−05−22 14:45:27'),
(41, 'Enjoyed it!', '8781236784517', 4, '2023−05−22 14:45:27'),
(42, 'Couldn not get into the story', '8781236784517', 2,
'2023−05−22 14:45:27'),
(43, 'Could not put it down!', '8781236784518', 5,
'2023−05−22 14:45:27'),
(44, 'Average read', '8781236784518', 3, '2023−05−22 14:45:27'),
(45, 'Disappointing ending', '8781236784518', 2,
'2023−05−22 14:45:27'),
(46, 'Engrossing', '8781236784519', 4, '2023−05−22 14:45:27'),
(47, 'Not for me', '8781236784519', 2, '2023−05−22 14:45:27'),
(48, 'Well−written', '8781236784519', 4, '2023−05−22 14:45:27'),
(49, 'Could not stop reading', '8781236784520', 5,
'2023−05−22 14:45:27'),
(50, 'Underwhelming', '8781236784520', 2, '2023−05−22 14:45:27'),
(51, 'Interesting premise', '8781236784520', 4,
'2023−05−22 14:45:27'),
(52, 'Captivating', '8781236784521', 5, '2023−05−22 14:45:27'),
(53, 'Did not like it', '8781236784521', 2, '2023−05−22 14:45:27'),
(54, 'Well worth the read', '8781236784521', 4,
'2023−05−22 14:45:27'),
(55, 'Fantastic book!', '8781236784522', 5, '2023−05−22 14:45:27');


−−
−− Dumping data for table 'school'
−−

INSERT INTO 'school' ('school_id', 'school_name', 'mail_address',
'city', 'phone', 'email', 'principal_name') VALUES
(1, 'paideia', 'soutsou 35', 'athens', '2102815535',
'paideia@mail.com', 'afstiros'),
(2, 'ipomoni', 'avgis 12', 'peiraias', '2102867867',
'ipomoni@mail.com', 'iremos'),
(3, 'kalosini', 'komninou 24', 'thessaloniki', '2102889098',
 'kalosini@mail.com', 'xalaros');


−−
−− Dumping data for table 'user'
−−

INSERT INTO 'user' ('user_id', 'username', 'password', 'role_id',
 'controller_name', 'borrowed_books', 'school_id', 'last_login',
 'reserved_copies', 'date_of_birth', 'first_name', 'last_name',
 'status') VALUES
(1, 'johnsmith', '123', 4, NULL, 6, 1, '2023−06−02 15:57:58', 2,
```

```
735  NULL, 'John', 'Smith', 'enabled'),
736  (2, 'alicejones', 'alicepass', 4, NULL, 0, 2, '2023-06-02 15:54:09',
737  0, NULL, 'Alice', 'Jones', 'enabled'),
738  (3, 'mikesullivan', 'sullivanpass', 4, NULL, 1, 3,
739  '2023-06-02 15:54:09', 0, NULL, 'Mike', 'Sullivan', 'enabled'),
740  (4, 'sarahwilson', 'wilsonpass', 4, NULL, 1, 1,
741  '2023-06-02 15:54:09', 2, NULL, 'Sarah', 'Wilson', 'enabled'),
742  (5, 'davidthompson', 'thompsonpass', 4, NULL, 0, 2,
743  '2023-06-02 15:54:09', 0, NULL, 'David', 'Thompson', 'enabled'),
744  (6, 'emilyharris', 'harrispass', 4, NULL, 0, 3,
745  '2023-06-02 15:54:09', 0, NULL, 'Emily', 'Harris', 'enabled'),
746  (7, 'michaelbrown', 'brownpass', 4, NULL, 1, 1,
747  '2023-06-02 15:54:09', 0, NULL, 'Michael', 'Brown', 'enabled'),
748  (8, 'jessicawilson', 'wilsonpass', 4, NULL, 0, 2,
749  '2023-06-02 15:54:09', 0, NULL, 'Jessica', 'Wilson', 'enabled'),
750  (9, 'alexandermartin', 'martinpass', 4, NULL, 0, 3,
751  '2023-06-02 15:54:09', 0, NULL, 'Alexander', 'Martin', 'enabled'),
752  (10, 'lauradavis', 'davispass', 4, NULL, 2, 1,
753  '2023-06-02 15:54:09', 0, NULL, 'Laura', 'Davis', 'enabled'),
754  (11, 'danielmoore', 'moorepass', 4, NULL, 0, 2,
755  '2023-06-02 15:54:09', 0, NULL, 'Daniel', 'Moore', 'enabled'),
756  (12, 'oliviaclark', 'clarkpass', 4, NULL, 0, 3,
757  '2023-06-02 15:54:09', 0, NULL, 'Olivia', 'Clark', 'enabled'),
758  (13, 'jacksonrodriguez', 'rodriguezpass', 4, NULL, 1, 1,
759  '2023-06-02 15:54:09', 0, NULL, 'Jackson', 'Rodriguez', 'enabled'),
760  (14, 'sophialee', 'leepass', 4, NULL, 0, 2, '2023-06-02 15:54:09', 0,
761  NULL, 'Sophia', 'Lee', 'enabled'),
762  (15, 'ethanmartinez', 'martinezpass', 4, NULL, 1, 3,
763  '2023-06-02 15:54:09', 2, NULL, 'Ethan', 'Martinez', 'enabled'),
764  (16, 'emilylopez', 'lopezpass', 4, NULL, 0, 1, '2023-06-02 15:54:09',
765  1, NULL, 'Emily', 'Lopez', 'enabled'),
766  (17, 'jaydenhernandez', 'hernandezpass', 4, NULL, 0, 2,
767  '2023-06-02 15:54:09', 0, NULL, 'Jayden', 'Hernandez', 'enabled'),
768  (18, 'ameliajohnson', 'johnsonpass', 4, NULL, 0, 3,
769  '2023-06-02 15:54:09', 0, NULL, 'Amelia', 'Johnson', 'enabled'),
770  (19, 'williamtaylor', 'taylorpass', 4, NULL, 0, 1,
771  '2023-06-02 15:54:09', 0, NULL, 'William', 'Taylor', 'enabled'),
772  (20, 'chloewilson', 'wilsonpass', 4, NULL, 0, 2,
773  '2023-06-02 15:54:09', 0, NULL, 'Chloe', 'Wilson', 'enabled'),
774  (21, 'noahrodriguez', 'rodriguezpass', 4, NULL, 0, 3,
775  '2023-06-02 15:54:09', 0, NULL, 'Henry', 'Anderson', 'enabled'),
776  (22, 'sophiamartinez', 'martinezpass', 4, NULL, 0, 1,
777  '2023-06-02 15:54:09', 0, NULL, 'Oliver', 'Brown', 'enabled'),
778  (23, 'liamlopez', 'lopezpass', 4, NULL, 0, 2, '2023-06-02 15:54:09',
779  0, NULL, 'Emily', 'Thomas', 'enabled'),
780  (24, 'isabellaharris', 'harrispass', 4, NULL, 0, 3,
781  '2023-06-02 15:54:09', 0, NULL, 'Mia', 'Hernandez', 'enabled'),
782  (25, 'aidenbrown', 'brownpass', 4, NULL, 0, 1,
783  '2023-06-02 15:54:09', 0, NULL, 'Liam', 'Smith', 'enabled'),
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784  (26, 'miamartin', 'martinpass', 4, NULL, 0, 2,
785  '2023−06−02_15:54:09', 0, NULL, 'Scarlett', 'Wilson', 'enabled'),
786  (27, 'lucasdavis', 'davispass', 4, NULL, 0, 3,
787  '2023−06−02_15:54:09', 0, NULL, 'Alexander', 'Martinez', 'enabled'),
788  (28, 'charlottejackson', 'jacksonpass', 4, NULL, 0, 1,
789  '2023−06−02_15:54:09', 0, NULL, 'Charlotte', 'Jackson', 'enabled'),
790  (29, 'benjaminnelson', 'nelsonpass', 4, NULL, 0, 2,
791   '2023−06−02_15:54:09', 0, NULL, 'Benjamin', 'Nelson', 'enabled'),
792  (30, 'harperdiaz', 'diazpass', 4, NULL, 0, 3,
793   '2023−06−02_15:54:09', 0, NULL, 'Harper', 'Diaz', 'enabled'),
794  (31, 'matthewthomas', 'thomaspass', 4, NULL, 0, 1,
795   '2023−06−02_15:54:09', 0, NULL, 'Matthew', 'Thomas', 'enabled'),
796  (32, 'victoriawalker', 'walkerpass', 4, NULL, 0, 2,
797   '2023−06−02_15:54:09', 0, NULL, 'Victoria', 'Walker', 'enabled'),
798  (33, 'aidenmitchell', 'mitchellpass', 4, NULL, 0, 3,
799   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
800  (34, 'abigailrobinson', 'robinsonpass', 4, NULL, 0, 1,
801   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
802  (35, 'jacobyoung', 'youngpass', 4, NULL, 0, 2,
803  '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
804  (36, 'emmawilson', 'wilsonpass', 4, NULL, 0, 3,
805   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
806  (37, 'jaydenbrown', 'brownpass', 4, NULL, 0, 1,
807   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
808  (38, 'oliviawilliams', 'williamspass', 4, NULL, 0, 2,
809   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
810  (39, 'johntaylor', 'taylorpass', 4, NULL, 0, 3,
811   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
812  (40, 'sophiawhite', 'whitepass', 4, NULL, 0, 1,
813   '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
814  (41, 'gracewilson', '123', 3, NULL, 0, 2, '2023−06−03_07:24:23',
815   0, '1970−01−01', 'Gracie', 'Wilson', 'enabled'),
816  (42, 'andrewthompson', 'thompsonpass', 3, NULL, 0, 1,
817   '2023−06−02_15:54:09', 0, '1971−01−01', NULL, NULL, 'enabled'),
818  (43, 'victoriamartin', 'martinpass', 3, NULL, 0, 3,
819   '2023−06−02_15:54:09', 0, '1972−01−01', NULL, NULL, 'enabled'),
820  (44, 'jacoblopez', 'lopezpass', 3, NULL, 0, 1,
821   '2023−06−02_15:54:09', 0, '1973−01−01', NULL, NULL, 'enabled'),
822  (45, 'mariaharris', 'harrispass', 3, NULL, 1, 2,
823   '2023−06−02_15:54:09', 0, '1974−01−01', NULL, NULL, 'enabled'),
824  (46, 'danielmiller', 'millerpass', 3, NULL, 0, 3,
825   '2023−06−02_15:54:09', 0, '1975−01−01', NULL, NULL, 'enabled'),
826  (47, 'sophiacarter', 'carterpass', 3, NULL, 1, 1,
827   '2023−06−02_15:54:09', 0, '1976−01−01', NULL, NULL, 'enabled'),
828  (48, 'ethanjones', 'jonespass', 3, NULL, 0, 2,
829   '2023−06−02_15:54:09', 0, '1977−01−01', NULL, NULL, 'enabled'),
830  (49, 'oliviamartinez', 'martinezpass', 3, NULL, 0, 3,
831   '2023−06−02_15:54:09', 0, '1978−01−01', NULL, NULL, 'enabled'),
832  (50, 'liamdavis', 'davispass', 3, NULL, 0, 1,
```

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833       '2023−06−02_15:54:09', 0, '1979−01−01', NULL, NULL, 'enabled'),
834   (51, 'avaadams', 'adamspass', 3, NULL, 1, 2,
835       '2023−06−02_15:54:09', 0, '1980−01−01', NULL, NULL, 'enabled'),
836   (52, 'noahcruz', 'cruzpass', 3, NULL, 0, 3,
837       '2023−06−02_15:54:09', 0, '1981−01−01', NULL, NULL, 'enabled'),
838   (53, 'isabellaevans', 'evanspass', 3, NULL, 0, 1,
839       '2023−06−02_15:54:09', 0, '1982−01−01', NULL, NULL, 'enabled'),
840   (54, 'aidenparker', 'parkerpass', 3, NULL, 0, 2,
841       '2023−06−02_15:54:09', 0, '1983−01−01', NULL, NULL, 'enabled'),
842   (55, 'sophiawright', 'wrightpass', 3, NULL, 1, 3,
843   '2023−06−02_15:54:09', 0, '1984−01−01', NULL, NULL, 'enabled'),
844   (56, 'bobmarley', 'marleypass', 1, NULL, 0, NULL,
845       '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
846   (57, 'johndoe', 'doepass', 2, 'doe', 2, 1,
847       '2023−06−03_11:55:28', 0, NULL, NULL, NULL, 'enabled'),
848   (58, 'janedonte', 'janepass', 2, 'donte', 1, 2,
849       '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
850   (59, 'marksmith', 'smithpass', 2, 'smith', 1, 3,
851       '2023−06−02_15:54:09', 0, NULL, NULL, NULL, 'enabled'),
852   (63, 'nikos', '1', 4, NULL, 0, 2, '2023−06−02_15:54:09',
853    0, '2023−05−03', NULL, NULL, 'enabled'),
854   (66, 'geovarv', 'varvpass', 4, NULL, 0, 2,
855   '2023−06−02_15:54:09', 0, '2023−05−04', 'giorgos', 'varveris',
856   'enabled');
857
858   −−
859   −− Dumping data for table 'writer'
860   −−
861
862   INSERT INTO 'writer' ('last_name', 'first_name', 'isbn') VALUES
863   ('Smith', 'John', '8781236784503'),
864   ('Johnson', 'Emily', '8781236784504'),
865   ('Williams', 'Michael', '8781236784505'),
866   ('Brown', 'Jessica', '8781236784506'),
867   ('Jones', 'David', '8781236784507'),
868   ('Davis', 'Sophia', '8781236784508'),
869   ('Miller', 'Matthew', '8781236784509'),
870   ('Wilson', 'Olivia', '8781236784510'),
871   ('Moore', 'Andrew', '8781236784511'),
872   ('Davis', 'Noah', '8781236784511'),
873   ('Taylor', 'Ava', '8781236784512'),
874   ('Anderson', 'Daniel', '8781236784513'),
875   ('Adams', 'Gabriel', '8781236784513'),
876   ('Thomas', 'Sofia', '8781236784514'),
877   ('Jackson', 'Joseph', '8781236784515'),
878   ('White', 'Charlotte', '8781236784516'),
879   ('Harris', 'William', '8781236784517'),
880   ('Martin', 'Madison', '8781236784518'),
881   ('Thompson', 'Ethan', '8781236784519'),
```

```
882  ('Garcia', 'Emma', '8781236784520'),
883  ('Martinez', 'James', '8781236784521'),
884  ('Robinson', 'Amelia', '8781236784522'),
885  ('Clark', 'Benjamin', '8781236784523'),
886  ('Rodriguez', 'Mia', '8781236784524'),
887  ('Lewis', 'Logan', '8781236784525'),
888  ('Miller', 'Sophia', '8781236784525'),
889  ('Lee', 'Abigail', '8781236784526'),
890  ('Walker', 'Jacob', '8781236784527'),
891  ('Hall', 'Elizabeth', '8781236784528'),
892  ('Allen', 'Henry', '8781236784529'),
893  ('Young', 'Ella', '8781236784530'),
894  ('Lopez', 'Alexander', '8781236784531'),
895  ('Green', 'Chloe', '8781236784532'),
896  ('Adams', 'Gabriel', '8781236784533'),
897  ('Adams', 'Sebastian', '8781236784533'),
898  ('Nelson', 'Grace', '8781236784534'),
899  ('Carter', 'Ryan', '8781236784535'),
900  ('Perez', 'Lily', '8781236784536'),
901  ('Turner', 'Gabriel', '8781236784537'),
902  ('Collins', 'Zoe', '8781236784538'),
903  ('Ward', 'Samuel', '8781236784539'),
904  ('Baker', 'Avery', '8781236784540'),
905  ('Bell', 'Sophie', '8781236784541'),
906  ('Murphy', 'Jackson', '8781236784542'),
907  ('Rivera', 'Harper', '8781236784543'),
908  ('Cook', 'Levi', '8781236784544'),
909  ('Rogers', 'Addison', '8781236784545'),
910  ('Wilson', 'Jackson', '8781236784545'),
911  ('Morgan', 'Natalie', '8781236784546'),
912  ('Peterson', 'Jack', '8781236784547'),
913  ('Cooper', 'Aria', '8781236784548'),
914  ('Reed', 'Jason', '8781236784549'),
915  ('Bailey', 'Brooklyn', '8781236784550'),
916  ('Sanders', 'Nicholas', '8781236784551'),
917  ('Price', 'Samantha', '8781236784552'),
918  ('Howard', 'Elijah', '8781236784553'),
919  ('Long', 'Hannah', '8781236784554'),
920  ('Simmons', 'Caleb', '8781236784555'),
921  ('Foster', 'Layla', '8781236784556'),
922  ('Torres', 'Isaac', '8781236784557'),
923  ('Smith', 'Mia', '8781236784557'),
924  ('Gray', 'Scarlett', '8781236784558'),
925  ('Ramirez', 'Victoria', '8781236784559'),
926  ('Williams', 'Emma', '8781236784560'),
927  ('Adams', 'Gabriel', '8781236784560'),
928  ('James', 'Wyatt', '8781236784560'),
929  ('Watson', 'Madelyn', '8781236784561'),
930  ('Brooks', 'Christian', '8781236784562'),
```

```
931   ('Bennett', 'Evelyn', '8781236784563'),
932   ('Hill', 'Owen', '8781236784564'),
933   ('Sullivan', 'Lillian', '8781236784565'),
934   ('Wallace', 'Luke', '8781236784566'),
935   ('Coleman', 'Aubrey', '8781236784567'),
936   ('Jones', 'Ava', '8781236784567'),
937   ('West', 'Isaiah', '8781236784568'),
938   ('Morris', 'Stella', '8781236784569'),
939   ('Adams', 'Gabriel', '8781236784570'),
940   ('Turner', 'Zoe', '8781236784571'),
941   ('Collins', 'Elijah', '8781236784572'),
942   ('Johnson', 'Liam', '8781236784572'),
943   ('Ward', 'Leah', '8781236784573'),
944   ('Adams', 'Gabriel', '8781236784574'),
945   ('Baker', 'Julian', '8781236784574'),
946   ('Bell', 'Sarah', '8781236784575'),
947   ('Murphy', 'Adam', '8781236784576'),
948   ('Rivera', 'Audrey', '8781236784577'),
949   ('Wilson', 'Elijah', '8781236784578'),
950   ('Cook', 'Nathan', '8781236784578'),
951   ('Rogers', 'Avery', '8781236784579'),
952   ('Morgan', 'Bella', '8781236784580'),
953   ('Peterson', 'Carter', '8781236784581'),
954   ('Cooper', 'Savannah', '8781236784582'),
955   ('Reed', 'Hunter', '8781236784583'),
956   ('Brown', 'Oliver', '8781236784583'),
957   ('Bailey', 'Lillian', '8781236784584'),
958   ('Sanders', 'Ian', '8781236784585'),
959   ('Price', 'Genesis', '8781236784586'),
960   ('Howard', 'Christopher', '8781236784587'),
961   ('Long', 'Layla', '8781236784588'),
962   ('Simmons', 'Charles', '8781236784589'),
963   ('Foster', 'Hazel', '8781236784590'),
964   ('Torres', 'Joshua', '8781236784591'),
965   ('Moore', 'Aria', '8781236784592'),
966   ('Gray', 'Nova', '8781236784592'),
967   ('Ramirez', 'Emma', '8781236784593'),
968   ('James', 'Andrew', '8781236784594'),
969   ('Watson', 'Ava', '8781236784595'),
970   ('Brooks', 'Joseph', '8781236784596'),
971   ('Bennett', 'Scarlett', '8781236784597');
972   COMMIT;
973
974   /*!40101 SET CHARACTER_SET_CLIENT=@OLD_CHARACTER_SET_CLIENT */;
975   /*!40101 SET CHARACTER_SET_RESULTS=@OLD_CHARACTER_SET_RESULTS */;
976   /*!40101 SET COLLATION_CONNECTION=@OLD_COLLATION_CONNECTION */;
```

1.3 User Manual

1.3.1 Login/Signup

Ο κάθε χρήστης εισέρχεται στην εφαρμογή είτε κάνοντας login είτε κάνοντας εγγραφή αν δεν έχει ήδη δημιουργήσει λογαριασμό. Η εγγραφή επιτρέπεται μόνο σε καθηγητές και μαθητές (δεν έχει κάποιος το δικαίωμα να εγγραφεί ως administrator ή controller). Για να γίνει είσοδος από κάποιον χρήστη, θα πρέπει πρώτα ο λογαριασμός του να εγκριθεί από τον controller του σχολείου του.

1.3.2 Student

Communication Info

Μπορεί να δει τα στοιχειά επικοινωνίας του σχολείου του.

My account

Βλέπει τους δανεισμούς και τις κρατήσεις του, ενώ έχει δικαίωμα να αλλάξει και τον κωδικό του.

Search

Βλέπει τα βιβλία που ανήκουν στο σχολείο του. Μπορεί να κάνει αναζήτηση με βάση τον τίτλο, τον συγγραφέα, την κατηγορία ή τα διαθέσιμα αντίτυπα.

Borrow

Κάνει αίτηση για τον δανεισμό ενός βιβλίου

Make a Reservation

Κάνει αίτηση για την κράτηση ενός βιβλίου

Review

Γράφει κριτική και αξιολογεί οποιοδήποτε από τα βιβλία του σχολείου του.

1.3.3 Teacher

Communication Info

Μπορεί να δει τα στοιχειά επικοινωνίας του σχολείου του.

My account

Βλέπει τους δανεισμούς και τις κρατήσεις του, ενώ έχει δικαίωμα να αλλάξει και τον κωδικό του.

Search

Βλέπει τα βιβλία που ανήκουν στο σχολείο του. Μπορεί να κάνει αναζήτηση με βάση τον τίτλο, τον συγγραφέα, την κατηγορία ή τα διαθέσιμα αντίτυπα.

Borrow

Κάνει αίτηση για τον δανεισμό ενός βιβλίου

Make a Reservation

Κάνει αίτηση για την κράτηση ενός βιβλίου

Review

Γράφει κριτική και αξιολογεί οποιοδήποτε από τα βιβλία του σχολείου του.

My info

Έχει δικαίωμα να αλλάξει τα προσωπικά του στοιχεία

1.3.4   Controller

Communication Info

Μπορεί να δει τα στοιχειά επικοινωνίας του σχολείου του.

My account

Βλέπει τους δανεισμούς και τις κρατήσεις του, ενώ έχει δικαίωμα να αλλάξει και τον κωδικό του.

Search

Βλέπει τα βιβλία που ανήκουν στο σχολείο του. Μπορεί να κάνει αναζήτηση με βάση τον τίτλο, τον συγγραφέα, την κατηγορία ή τα διαθέσιμα αντίτυπα.

Borrow

Δέχεται/Απορρίπτει τις αιτήσεις δανεισμού.

Make a Reservation

Δέχεται/Απορρίπτει τις αιτήσεις για κράτηση.

Review

Βλέπει τον μέσο όρο των κριτικών των χρηστών που ανήκουν στο σχολείο του και τον μέσο όρο των κριτικών ανά κατηγορία.

Expired Borrowings

Βλέπει τους δανεισμούς που είναι εκπρόθεσμοι κατά έναν συγκεκριμένο αριθμό ημερών. Επίσης ψάχνει με βάση το όνομα ή το επώνυμο χρηστών για εκπρόθεσμους δανεισμούς.

Add Book

Προσθέτει ένα βιβλίο στη βιβλιοθήκη του σχολείου του.

Alter Book

Αλλάζει τις πληροφορίες ενός υπάρχοντος βιβλίου του σχολείου του.

User Status

Ενεργοποιεί/Απενεργοποιεί τους λογαριασμούς των χρηστών του σχολείου του.

1.3.5   Administrator

Borrowigs per School

Βλέπει τον αριθμό δανεισμών ανά σχολείο κατά έναν μήνα ή σε διάρκεια ενός ημερολογιακού έτους.

Search per Field

Βλέπει ποιοι συγγραφείς έχουν γράψει τουλάχιστον ένα βιβλίο που ανήκει σε μια συγκεκριμένη κατηγορία. Επίσης, βλέπει ποιοι καθηγητές έχουν δανειστεί τουλάχιστον ένα βιβλίο μιας συγκεκριμένης κατηγορίας.

Young Teachers

Βλέπει τους καθηγητές που είναι κάτω των 40 ετών ταξινομημένους με βάση τον αριθμό των βιβλίων που έχουν δανειστεί.

Unlucky Writers

Βλέπει τους συγγραφείς των οποίων κανένα βιβλίο δεν έχει δανειστεί σε κάποιο χρήστη.

Writers with Fewer Books

Βλέπει τους συγγραφείς που έχουν γράψει τουλάχιστον 5 λιγότερα βιβλία από τον συγγραφέα που έχει γράψει τα περισσότερα.

Backup

Μπορεί να δημιουργήσει ένα αντίγραφο της βάσης.

Add School

Μπορεί να προσθέσει ένα σχολείο στη βάση.

Controller Status

Ενεργοποιεί/Απενεργοποιεί τον λογαριασμό κάθε controller.

1.4 Βήματα Εγκατάστασης Εφαρμογής & Configurations

Prerequisite installation steps on macOS

1. Download sql packages with homebrew:

```
/bin/bash -c "$(curl -fsSL https://raw.githubusercontent.com
/Homebrew/install/HEAD/install.sh)"
```

```
brew install mysql
```

2. Open a terminal and login as the root user. This can be done by the following command:

```
sudo mysql -u root -p
```

3. Create a new MySQL user with the following credentials as shown in the below command:

```
CREATE USER 'root'@'localhost' IDENTIFIED BY 'root';
```

4. Grant privilages to the user on the database using:

```
GRANT ALL PRIVILEGES ON library to 'root'@'localhost' WITH
GRANT OPTION;
```

5. To check if the privilages are set correctly you can see the grant table wih this command:

```
FLUSH PRIVILEGES;
```

6. To clone this repository, use the following command:

```
git clone https://github.com/nikoskarako/Library-Database-Project
```

in a local working directory.

7. Create the database in a DBMS that supports MySQL/MariaDB and run the scripts "library_schema.sql" and "library_insert_data.sql"

8. Visit http://localhost:8889/login.php from your web browser

1.5   Git Repository της εφαρμογής

Μπορείτε να μεταβείτε στο Git Repository της εφαρμογής μας πατώντας **εδώ**