Dictionary Project Report

Front end part

1. HTML page(**dic.html**)

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="UTF-8" />
    <meta http-equiv="X-UA-Compatible" content="IE=edge" />
    <meta name="viewport" content="width=device-width, initial-scale=1.0" />
    <link href="dict.css" type="text/css" rel="stylesheet" />
    <script src="JQuery.js" type="text/javascript"></script>
    <script src="dict.js" type="text/javascript"></script>

    <title>Online Dictionary</title>
  </head>
  <body>
    <div class="container">
      <header>
        <h1>
          <span id="online">Online</span>
          <span id="dictionary">Dictionary</span>
        </h1>
        <hr />
      </header>
      <article>
        <div class="search-box">
          <input type="text" name="keyword" id="keyword" />
          <button id="btnsearch">Lookup</button>
        </div>
        <div id="loader">Fetching data...</div>
        <div class="search-result"></div>
      </article>
    </div>
  </body>
</html>
```

2. Client-side Java script (**dic.java**)

```javascript
3. $(document).ready(function () {
4.      $("#loader").hide();
5.      $(document).ajaxStart(function() { $("#loader").show(); })
6.      .ajaxStop(function() { $("#loader").hide(); });
7.      $('#btnsearch').on('click', search);
8.      function search() {
9.          console.log($('#keyword').val());
10.         let searchKeyword = $('#keyword').val().trim();
11.         $.ajax({
12.             "url": `http://localhost:3000/?keyword=${searchKeyword}`,
13.             "type": "GET",
14.             "success": myAjaxSuccessFunction,
15.             "error": ajaxFailure
16.         }).always(function() {
17.             $("#loader").hide();
18.          });
19.         function myAjaxSuccessFunction(data) {
20.             console.log(data);
21.            let searchResult = data;
22.            $('.search-result').empty();
23.            let wordtype='';
24.            for (let i = 0; i < searchResult.length; i++) {
25.                wordtype=searchResult[i].wordtype;
26.                if(wordtype.trim()!==''){
27.                    wordtype="("+wordtype+")";
28.                }
29.              $('.search-result').append(`
30.                <p>
31.                <span class="number">${i + 1}</span>
32.                <span class="wordtype">${wordtype}</span>
33.
34.                    ::${searchResult[i].definition}
35.                        </p>
36.                `)
37.            }
38.            console.log(data);
39.         }
40.         function ajaxFailure(xhr, status, exception) {
41.             $('.search-result').html('<strong>Result not found</strong>');
42.         }
43.     }
44. });
45.
```

Backend

1. Dictionary.js

```
const express = require('express');
const entries = require("./word.js");

const app = express();
const port = 3000;
const urlencodedParser = express.urlencoded({ extended: false })

app.get('/', urlencodedParser, function(req,res){
    console.log(req.query.keyword);
     entries.findByWord(req.query.keyword, (err, data) => {
        if (err) {
            res.send([]);
        }
        else res.send(data);
     });
});
app.listen(port, () => {
    console.log(`listening on port ${port}!`)
});
```

2. word.js

```
const sql = require("./DatabaseConnection.js");
class DictionaryEntity {
  constructor(entry) {
    this.word = entry.word;
    this.wordtype = entry.wordtype;
    this.definition = entry.definition;
  }
  static findByWord(word, result) {
    sql.query(`SELECT * FROM entries WHERE word = '${word}'`, (err, res) => {
      if (err) {
        console.log("error: ", err);
        result(err, null);
        return;}
      if (res.length) {
        result(null, res);
        return;
      }
      result({ kind: "not_found" }, null);
    });
  }
}
module.exports = DictionaryEntity;
```
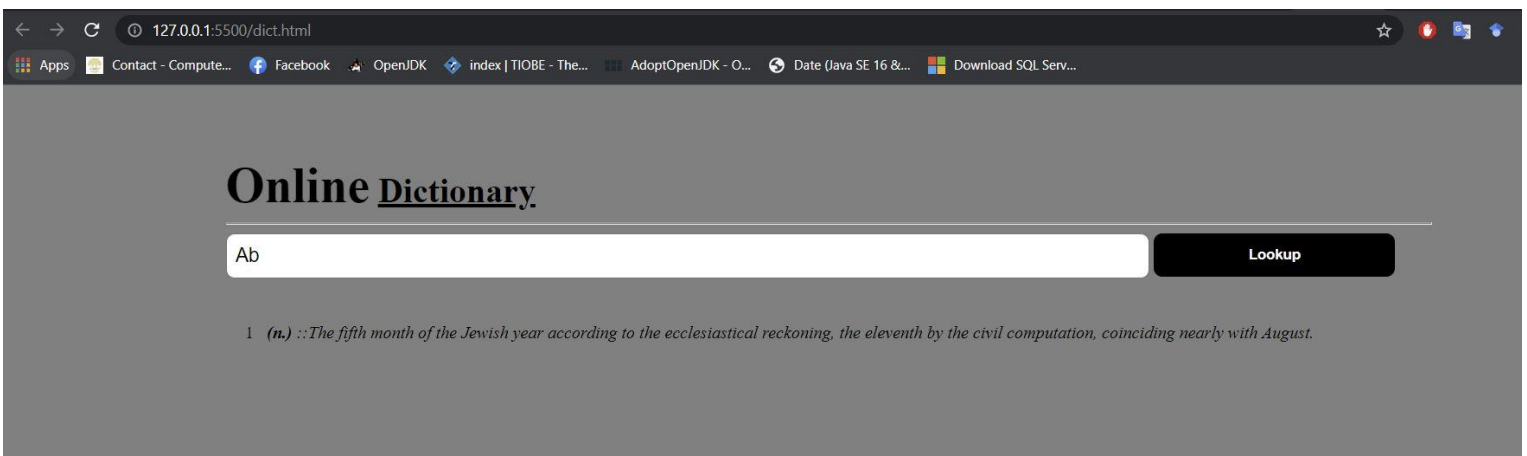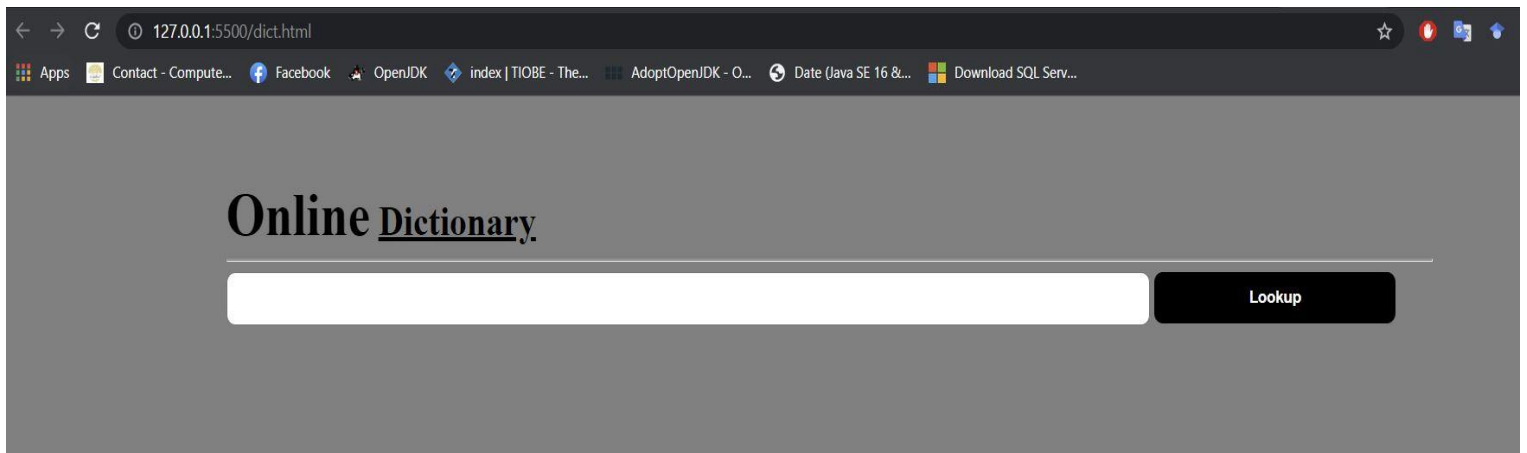
3. Database connection (DatabaseConnection.js)

```javascript
const mysql = require("mysql2");

// Creating database connection with mysql database
const mysqlconnection = mysql.createConnection({
  host: 'localhost',
  user: 'root',
  password: 'Pa$$$w0rd)',
  database: 'entries'
});
// trying to open the database if there is no error and exporting the module
mysqlconnection.connect((error) => {
  if (error) throw error;
  console.log("Database connection successfull");
});

module.exports = mysqlconnection;
```

A working demo screenshots

127.0.0.1:5500/dict.html

Contact - Compute...   Facebook   OpenJDK   index | TIOBE - The...   AdoptOpenJDK - O...   Date (Java SE 16 &...   Download SQL Serv...

Online Dictionary

Abandon   Lookup

1 *(v. t.) ::To cast or drive out; to banish; to expel; to reject.*

2 *(v. t.) ::To give up absolutely; to forsake entirely ; to renounce utterly; to relinquish all connection with or concern on; to desert, as a person to whom one owes allegiance or fidelity; to quit; to surrender.*

3 *(v. t.) ::Reflexively: To give (one's self) up without attempt at self-control; to yield (one's self) unrestrainedly; -- often in a bad sense.*

4 *(v. t.) ::To relinquish all claim to; -- used when an insured person gives up to underwriters all claim to the property covered by a policy, which may remain after loss or damage by a peril insured against.*

5 *(v.) ::Abandonment; relinquishment.*

6 *(n.) ::A complete giving up to natural impulses; freedom from artificial constraint; careless freedom or ease.*

SQL File 3*   entries

Limit to 1000 rows

```
1  • SELECT * FROM entries.entries;
```

SCHEMAS

Filter objects

- entries
  - ▼ Tables
    - ▼ entries
      - ▼ Columns
        - ◆ word
        - ◆ wordtype
        - ◆ definition
      - Indexes
      - ▶ Foreign Keys
      - ▶ Triggers
  - Views
  - Stored Procedures
  - Functions
- sakila
- sample_tutorial_schema
  - ▶ Tables
  - Views
  - Stored Procedures
  - Functions
- sys
- world

Administration   Schemas

Result Grid   Filter Rows: Export: Wrap Cell Content: Fetch rows:

word	wordtype	definition
A		The first letter of the English and of many other alphabets. The capital A of the alphabets of Middle and Western Europe, as also the small letter (a), besides t...
A		The name of the sixth tone in the model major scale (that in C), or the first tone of the minor scale, which is named after it the scale in A minor. The second str...
A		An adjective, commonly called the indefinite article, and signifying one or any, but less emphatically.
A		In each; to or for each; as, "twenty leagues a day", "a hundred pounds a year", "a dollar a yard", etc.
A	prep.	In; on; at; by.
A	prep.	In process of; in the act of; into; to; -- used with verbal substantives in -ing which begin with a consonant. This is a shortened form of the preposition an (whic...
A		Of.
A		A barbarous corruption of have, of he, and sometimes of it and of they.
A		An expletive, void of sense, to fill up the meter
A-		A, as a prefix to English words, is derived from various sources. (1) It frequently signifies on or in (from an, a forms of AS. on), denoting a state, as in afoot, ...
A 1		A registry mark given by underwriters (as at Lloyd's) to ships in first-class condition. Inferior grades are indicated by A 2 and A 3

Navigator

SQL File 3*　　entries ✕

SCHEMAS

Filter objects

▼ entries
　▼ Tables
　　▼ entries
　　　▼ Columns
　　　　◆ word
　　　　◆ wordtype
　　　　◆ definition
　　　▶ Indexes
　　　▶ Foreign Keys
　　　▶ Triggers
　　 Views
　　 Stored Procedures
　　 Functions
▶ sakila
▼ sample_tutorial_schema
　▶ Tables
　 Views
　 Stored Procedures
　 Functions
▶ sys
▶ world

Administration　Schemas

Information

Table: entries

Columns:
word	varchar(25)
wordtype	varchar(20)
definition	text

Limit to 1000 rows

```
1    SELECT * FROM entries;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

word	wordtype	definition
Ab-		A prefix in many words of Latin origin. It signifies from, away , separating, or departure, as in
Ab	n.	The fifth month of the Jewish year according to the ecclesiastical reckoning, the eleventh by th
Abaca	n.	The Manila-hemp plant (Musa textilis); also, its fiber. See Manila hemp under Manila.
Abacinate	v. t.	To blind by a red-hot metal plate held before the eyes.
Abacination	n.	The act of abacinating.
Abaciscus	n.	One of the tiles or squares of a tessellated pavement; an abaculus.
Abacist	n.	One who uses an abacus in casting accounts; a calculator.
Aback	adv.	Toward the back or rear; backward.
Aback	adv.	Behind; in the rear.
Aback	adv.	Backward against the mast; -- said of the sails when pressed by the wind.
Aback	n.	An abacus.
Abactinal	a.	Pertaining to the surface or end opposite to the mouth in a radiate animal; -- opposed to actina
Abaction	n.	Stealing cattle on a large scale.
Abactor	n.	One who steals and drives away cattle or beasts by herds or droves.
Abaculi	pl.	of Abaculus
Abaculus	n.	A small tile of glass, marble, or other substance, of various colors, used in making ornamental p
Abacuses	pl.	of Abacus
Abaci	pl.	of Abacus
Abacus	n.	A table or tray strewn with sand, anciently used for drawing, calculating, etc.
Abacus	n.	A calculating table or frame; an instrument for performing arithmetical calculations by balls slidir
Abacus	n.	The uppermost member or division of the capital of a column, immediately under the architrave
Abacus	n.	A tablet, panel, or compartment in ornamented or mosaic work.
Abacus	n.	A board, tray, or table, divided into perforated compartments, for holding cups, bottles, or the
Abada	n.	The rhinoceros

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan