

## **CODE REVIEW FOR CALENDAR WEBAPP**

### **In models:**

- ToDo Schema - time should be in a datetime format.
- user - image datatype should be in Buffer or base64.
- (security) - password data should not be stored as such - why? Encryption and decryption should be done

```
var encrypted = CryptoJS.AES.encrypt("Message", "Secret Passphrase");
```

```
//U2FsdGVkX18ZUVVvShFSES21qHsQEqZXMxQ9zgHy+bu0=
```

```
var decrypted = CryptoJS.AES.decrypt(encrypted, "Secret Passphrase");
```

```
//4d657373616765
```

### **Under Scripts:**

#### **In custom\_date.js:**

- inside constructor, methods should not be defined (nextMonth() and previousMonth())

#### **In main.js:**

```
- var monthAndYear = document.querySelector("#location"), date =  
document.querySelector("#temperature");
```

variable names is not following the standard (storing location value in monthAndYear variable is not ideal).

#### **In todos.js:**

- API calls should be moved from the current scripts folder and placed in the folder "routes/".

#### **In app.js & atlas.js:**

- connectString should be extracted and placed under configurations folder, since it can be reused across entire application.

#### **In package.json:**

- missing build script, its required when you want to publish the app to any server.

**In app.js:**

- `app.use(express.static("public"));`

this statement exposes entire public folder (contains stylesheets and scripts) which should not be exposed to API.

As an application, it should have unit tests to test individual components of application, which is missing.

**Missing:**

gitignore file since it is highly recommended to ignore the dependency files.

**UI Comments:**

- In landing page <https://my-calendar-web.herokuapp.com/>. it is not adapted to various screen sizes
- when adding to-do items, when the text field is empty and user clicks on add Todo, error message should be thrown.
- when adding duplicate (to-do item with date), the system should error <Todo item already exists for the same time>.
- adding to-do items for date < current\_date should not be allowed, since it kills the purpose of Todo list.
- Just above Todo list, current date is not readable since date is shown without proper title.
- Error handling is not done in login page when username and password is empty or wrong. (Multiple cases should be considered)
- In register form, duplicate emails are allowed, but user should be able create an account with unique email id only.

**Security:**

- In register form, password field should be checked for strength (at least one special, uppercase, number and lower case) to avoid intrusion using brute force mechanism.

