

## FIT295 Exam Preparation Checklist

### Important Notes:

- This checklist includes (but limited to) the major terms and concepts we have practiced during the semester only.
- This checklist does not include the theoretical lecture notes (weekly Alexandria notes) which are examinable.
- All the applications you have developed are examinable.
- Use this document as a checklist to ensure that all the major concepts have been studied.

### Week 1

- const, let and var in JavaScript
- functions and objects in JavaScript

### Week 2

- Classes in JS
- Export Modules
- npm init
- create an HTTP server
- respond to requests
- Query String
- require('url')
- path name

### Week 3

- route parameters
- express
- app.get, app.listen
- url.parse
- res.send
- app.get('/pathname', function (req, res) { });
- req.url
- req.query
- req.params
- express.Router()
- Routing in Express.js

### Week 4

- body-parser
- app.use (middleware)

- `res.sendFile`
- `require('morgan')`
- `res.render()`
- EJS
- `<%= %>`
- `<% %>`
- `app.use(express.static())`
- IaaS,PaaS,SaaS

#### Week 5

- `require('mongodb')`
- `MongoClient.connect()`
- `insertOne`, `insertMany`, `findOne`
- `db.collection().find({}).toArray()`
- Query the database
- comparison, sorting, and limit the result Expression Operators
- delete and update commands

#### Week 6

- Mongoose Schema and Models
- data validation and validator
- default values
- CRUD operations in Mongoose
- Querying Documents with Mongoose

#### Week 7

- GET, PUT, POST, DELETE
- Mongoose in RESTful applications
- Mongoose populate method
- Mongoose CRUD operations
- Routing in RESTful applications

#### Week 8

- Angular Module, Components, Services
- `ng new`, `ng serve`, `ng g c`, `ng g s`
- `{{ }}`
- Data Binding
- `()`
- `[]`
- `*ngIf`, `*ngFor`, `ngSwitch`

## Week 9

- `app.use("/", express.static())`
- `constructor()` , `ngOnInit()`
- component selector (i.e. `<app-actor></app-actor>`)
- `@Injectable`
- `this.http.get()`, `this.http.post()`, `this.http.put()`, `this.http.delete()`
- inject service to component
- Observables and Subscribe

## Week 10

- Routing in Angular
- `const routingTable: Routes = []`
- `RouterModule.forRoot`
- `<router-outlet></router-outlet>`
- `routerLink`
- `ngModule: declarations: [], imports: [], providers: []`

## Week 11

- `this.socket = io.connect();`
- `socket.on()` , `io.on()`
- `socket.emit()`, `socket.boradcast.emit()`
- `io.emit()`, `io.sockets.emit()`
- `io.on("connection")`

## Week 12

- `Passport.js`
- `passport.authenticate()`
- `firebase.database().ref`
- `firebase push`