#### ITU ACM JS to NodeJS Mufredat

#### Week 1:

#### Topics:

- Development Environment Setup
- Variables
- Primitive Data Types
- Control Flow
- Function Declaration and Usage

# Example Project:

- Writing and analyzing simple programs printing patterns with '\*' stars

#### Week 2:

#### Topics:

- Objects and Arrays in Depth
- Pass by Reference vs Pass by Copy
- JSON
- Brief touch on garbage collector

# Example Project:

- Exploring issue data of apache foundations jira boards

#### Week 3:

#### Topics:

- Map, Filter, Reduce
- Arrow Functions
- Storing Functions in Variables

# Example Project:

- Analyzing previous data set in order to create useful statistics

# Week 4:

# Topics:

- Promises
- Async / Await

# Example Project:

- Examples on browser

#### Week 5:

# Topics:

- ES6 Classes
- Prototype Inheritance

# Example Project:

- Creating an async image loader class

# Week 6:

# Topics:

- Introduction to NodeJS
- Buffers, streams etc.
- File IO

# Example Project:

- Creating a simple http server without external libraries