**ADVANCED WEB APPLICATION DEVELOPMENT**

**ASSIGNMENT WEEK 6**

1.Explain Jade Template with express.

Answer 1: Jade is a high-performance template engine for Node.js and Express. It is a simple and easy-to-use template engine that can be used to create HTML pages dynamically. [Jade is compatible with Express.js out of the box (in fact, it’s the default choice), so to use Jade with Express.js, you just need to install a template engine module jade (https://www.npmjs.org/package/jade) and provide an extension to Express.js via the view engine setting **1**](https://webapplog.com/jade-handlebars-express/).

Here’s an example of how to use Jade with Express.js:

1. Install Jade using npm:

npm install jade

1. Set up your Express app to use Jade as the view engine:

const express = require('express');

const app = express();

app.set('view engine', 'jade');

1. Create a Jade file in your views directory:

doctype html

html

head

title= pageTitle

body

h1= pageTitle

p Welcome to #{pageTitle}

1. Render the Jade file in your route handler:

app.get('/', function(req, res) {

res.render('index', { pageTitle: 'Home' });

});

2.What is Template Engine. Give Example

Answer2: A template engine is a software component that is used to generate HTML pages dynamically. It allows you to define templates for your web pages and then fill in the data dynamically at runtime. [This makes it easy to create dynamic web pages that can be customized for each user **1**](https://en.wikipedia.org/wiki/Template_processor).

There are many template engines available for different programming languages. [Some examples of template engines designed specifically for web application development include JavaServer Pages (JSP), Active Server Pages (ASP), Genshi (for Python), eRuby, and EJS (for JavaScript)](https://en.wikipedia.org/wiki/Template_processor).

3.Define Express Template?

Answer3: Express is a popular web framework for Node.js that provides a robust set of features for web and mobile applications. [It includes a powerful routing system, middleware support, and a template engine that makes it easy to create dynamic web pages **1**](https://www.digitalocean.com/community/tutorials/nodejs-express-template-engines).

There are many template engines available for Express. [The default template engine found in Express is Jade (now known as Pug), but it also supports several others including EJS and Mustache](http://expressjs.com/en/guide/using-template-engines.html)

4.Develop  template engine. Using Jade templates to create HTML pages dynamically.

Answer 4: Here’s an example of how to use Jade templates with Express to create dynamic web pages :

1. Install Jade using the following command:

npm install jade --save

1. Set the view engine to Jade in your Express app:

app.set('view engine', 'jade');

1. Create a Jade template file (e.g., index.jade) in the views directory of your Express app:

html

head

title= title

body

h1= message

1. Render the Jade template in your Express app:

app.get('/', function (req, res) {

res.render('index', { title: 'Hello', message: 'Welcome to my website!' })

})

This will render the index.jade template as an HTML page with the title “Hello” and the message “Welcome to my website!”.