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Subject code: 15MSSE36

Subject Name: ADVANCED WEB TECHNOLOGY

Date: 30.11.2020

Course: MSC - SOFTWARE SYSTEMS

Semester: V SEMESTER

PART-C

52. (a) STEPS TO CREATE A DJANGO PROJECT:

In the command prompt, enter the following commands.

1) python --version

Step 2: pip --version

Step 3: django-admin --version

To have different Django configuration for different projects create a virtual environment

Step 4: pip install virtualenvwrapper-win (Install virtual environment)

Step 5: mkvirtualenv sd1 (creating the virtual environment for the Django project)

Step 6: pip install Django (using pip package Django is installed)

Step 7: django-admin --version

Step 8: create a folder mkdir myproject and switch to the folder myproject.

Step 9: django-admin startproject hello

Step 10 : open the created folder and run the command as python runserv manage.py runserver.

Django App creation.

Step 1 : Go to myproject folder and enter the command as workon sd1

Step 2 : Enter the command python manage.py startapp hai and enter code.

Step 3 : Go to hai and create urls.py where urls.py is the (Reason for creating urls.py) Where urls.py will route the exact to views of the project.

Step 4 : creation of views.py (Reason) - where the mentioned views in urls.py must be written in the views.py inorder to route the views to the urls.py.

Step 5 : In hello-urls.py (hello-urls.py is created in the project creation) In which we need to include hai-urls.py. After inclusion the hai-urls.py page will be displayed in the browser.

52 b) There are three classes into which the group of three different factors that can be used to prove identity.

(i) something you know

(ii) something you have

(iii) something you are

Something you know:

The most common example of something you know is password, PIN or pass phrase.

Something you have:

Examples for something you have is digital certificates, smart cards or security tokens.

Something you are:

The third class of authentication factor is based on something that is part of yours where examples are retinal pattern, hand geometry, fingerprints, topography of face.

52 c) <u>Session</u>:

* A session means where it is tracking of single user interactions with the web application.

* HTTP is stateless protocol, which is fine for static web sites that don't care who anybody is, but which doesn't work for interactive web application.

* A modern web application needs a mechanism for identifying the stream of request generated by each individual users amid the request from other users who are connected to the application at the same time.

* Session provides that, and are very much like the web equivalent of issuing an employee an RFID

badge so they don't have to sign in every time they need access to something. SESSION MANAGEMENT

* Ofcourse, session fixation attacks should fail for a whole host of other reason too, but why make it easy for an attacker.

* Properly configure how your application will handle session concurrency and session invalidation.

* Make sure that encryption is properly used when it is applied to session state management.

* Use cookies securely and set the right flags such as HTTP only to mitigate the impact of other attacks.

Part-B

41. SVG is a language for describing 2D graphics in XML. canvas 2D graphics, on the fly (with Javascript). SVG is XML based, which means that every element is available within the SVG DOM. canvas is rendered pixel by pixel.

42. Two types of Layout in Bootstrap are

1) Fluid-Layout (class = "container-fluid")

2) Fixed layout (class = "container")

44° MERITS OF JQUERY :

* Jquery is widely used. Jquery is quite popular with website developers.

* promotes simplicity.

* cross - browser compatibility.

* pages load faster

* write less code, do more

45. ROLE OF CALLBACK FUNCTION IN AJAX :

A callback function is a function passed as a parameter to another function. If you have more than one AJax task in a website, you should create one function for executing the XMLHttprequest object, and one callback function for each AJAX task.

47- TWO-WAY DATA BINDING IN ANGULAR JS:

Data binding in angular JS is the synchronization between the model and view. When data in the model changes, the view reflects the changes, and when the data in the view changes, it reflects in the model so that model and view are updated as well.

50. HTML INJECTION:

HTML injection is an attack that is similar to cross-site scripting (XSS). while in the XSS vulnerability that attackers can inject and execute javascript code, The HTML injection attack only allows the injection of certain HTML tags. when an application doesnot properly handle user supplied data, an attacker can supply valid HTML code, typically via a parameter value, and inject their own content into the page.

43. JSON OBJECTS ARE DEFINED:

JSON objects are surrounded by the curly braces {}. JSON objects are written in key/value pairs. key must be strings, and value must be a valid JSON data type (string, number, object, array, boolean, null). keys and values are seperated by a colon. Each key/value pair is separated by comma (,).

46. ng-show DIRECTIVE IN ANGULARJS:

The ng-show directive shows the specified HTML element if the expression evaluates to true, otherwise the HTML element is hidden.

eg: <body ng-app>

     <p ng-show = "1==1"> Show </P>
     <p ng-show = "2==1"> Do not show </P>
   </body>

49. SINGLE SIGN ON:

Single sign on (SSO) login refers to when a user logs in to an application with a single set of credentials and is then automatically signed into multiple applications. A very popular example of SSO login is google's implementation for their software products.

48. ROLE OF ORM IN DJANGO:

One of the most powerful features of Django is its object Relational Mapper (ORM) which enables you to interact with your database, like you would with SQL. In fact django's ORM is just a pythonical way to create SQL to query and manipulate your database and get results in pythonic fashion.