
SCRIPTING LANGUAGES

Course Code: 13CS2203

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4 0 3

Pre requisites: Any programming course, knowledge of Unix and PC environments

Course Educational Objectives:

1. This course emphasizes programming using scripting languages for the purpose of collecting and manipulating system information by system administrators and managers.
2. Programming concepts such as data types and control structures will be discussed as well as operating system commands.
3. A variety of languages and utilities will be discussed such as the Bourne shell, Perl, awk, and the Common Gateway Interface. The student is expected to have programming experience and knowledge of the Unix and PC environments.

Course Outcomes:

Upon successful completion of this course, the students:

1. Understand the scripting language paradigm.
2. Know the tradeoffs (advantages and disadvantages) of scripting versus traditional programming.
3. Are proficient programmers in at least two scripting tools/languages, including bash and Perl.
4. Can write scripts using Unix/bash / perl.
5. Understand crypto system like encryption and decryption with scripting Languages.

UNIT- I

Introduction to PERL and Scripting- Scripts and Programs, Origin of Scripting , Scripting Today, Characteristics of Scripting Languages, Web Scripting, and the universe of Scripting Languages.

UNIT- II

PERL- Names and Values, Variables, Scalar Expressions, Control Structures, arrays, list, hashes, strings, pattern and regular expressions, subroutines, advance perl - finer points of looping, pack and unpack.

UNIT- III

File system, eval, data structures, packages, modules, objects, interfacing to the operating system, Creating Internet ware applications, Dirty Hands Internet Programming, security Issues.

PHP Basics- Features, Embedding PHP Code in your Web pages, Outputting the data to the browser, Data types, Variables, Constants, expressions, string interpolation, control structures.

Function ,Creating a Function, Function Libraries ,Arrays ,strings and Regular Expressions.

UNIT- IV

Advanced PHP Programming-Php and Web Forms, Files, PHP Authentication and Methodologies -Hard Coded, File Based, Database Based, IP Based, Login Administration, Uploading Files with PHP, Sending Email using PHP, PHP Encryption Functions, the Mcrypt package, Building Web sites for the World

UNIT – V

TCL – Tk: TCL Structure, syntax, Variables and Data in TCL, Control Flow, Data Structures, input/output, procedures , strings , patterns, files, Advance TCL- eval, source, exec and up level commands, Name spaces, trapping errors, event driven programs, making applications internet aware, Nuts and Bolts Internet Programming, Security Issues, C Interface.

TEXT BOOKS:

1. David Barron: “The World of Scripting Languages”, 1st Edition, Wiley Publications, 2009.
2. Steve Holden and David Beazley: “Python Web Programming”, 1st Edition, New Riders Publications.
3. Jason Gilmore: “Beginning PHP and MySQL”, 3rd Edition, Apress Publications (Dream tech.).

REFERENCES:

1. J.Lee and B.Ware: “Open Source Web Development with LAMP using Linux, Apache,MySQL,Perl and PHP” , 1st Edition, Pearson Education, 2002.
2. M.Lutz : “Programming Python”,SPD.
3. Julie Meloni and Matt Telles: “ PHP 6 Fast and Easy Web Development ” , 1st Edition, Cengage Learning Publications, 2008.