TIF21-31-46

Web Application Development

Pengembangan Aplikasi Web

BASIC INFORMATION

Course Credit	3 / 150 minutes per Week
Course Type	Required
Course Classification	Engineering Topics
Prerequisites	-

STUDENT AND LEARNING OUTCOMES

Covered Student Outcomes

Development of Engineering Solution (b)   Modern Tools Utilization (e)

Engineering Design (c)

Learning Outcomes

LO1   Students are able to explain and understand the various development of web technology and its difference in every generation.

LO2   Students are able to propose the process of making web application development in engineering.

LO3   Students are able to explain about web interface technology.

LO4   Students are able to reveal various steps and approaches in integrating the concept of programming Object Oriented with web technology interface.

LO5   Students are able to name and explain the different types of validation and apply it in the web programming code.

LO6   Students are able to explain the concept and technical data access through the web.

COURSE DESCRIPTION

This course discusses one of the software technology platforms known as Web technology. This course will discuss a collection of previous and current research findings that became the forerunner of web

technology evolution. This course will provide knowledge on the background of web technologies, web implementation on the community, and technical skills to develop and implement web technologies in case studies to be studied in this course.

TOPICS

1. Web Application Basic Framework
2. Web Application Software Engineering
3. Web Interface Technology
4. Web Application Encoding
5. Diagnosis of Web Applications
6. Web Input Validation
7. Web Control and Navigation
8. Middle Semester Exam
9. Accessing Data via Web
10. Manipulation of Data Through the Web
11. XML and Web
12. Security On Web Applications
13. Membership and Profiles
14. Contemporary Web Technology
15. Reusable Web Development
16. Final Exam Semester

REFERENCES

[1] Stephen Walther; Kevin Hoffman; Nate Dudek. *ASP.NET 4 Unleashed*. Sams, 2010.

[2] Shepherd, George. *Microsoft® ASP.NET 4 Step by Step*. Microsoft Press, 2010.

[3] Adrian W. West. *Practical HTML5 Projects*, Apress, 2012.

[4] Lyza Danger Gardner; Jason Grigsby. *Head First Mobile Web*, Oreilly Media, Inc, 2011.

[5] Ferdiana, R., *Pengembangan Aplikasi Web dengan Visual Web Developer Express 2008 101*, Elex Media. Indonesia, 2008.

[6] MacDonald, Matthew. 2012. *Beginning asp.net 4.5 in c#*, Apress. USA, 2012.