Study program: Information Technology	

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Course title: INTERNET PROGRAMMING

Teacher(s): Željko LJ. Jovanović

Course status: mandatory

Number of ECTS credits: 5

Prerequisite courses: Object-oriented programming, Databases

Course objectives

Acquaintance and mastery with basic and advanced concepts in the development of dynamic websites, Acquaintance with JSP and PHP pages as well as with JSP/Servlet technologies. Familiarity with service-oriented and multi-layered architectures.

Learning outcomes

Students will be able to develop multi-layer dynamic web applications using Java and PHP programming languages with the help of modern development environments.

Content of the course

Theoretical teaching

The course covers the following topics: Introduction to web programming (HTML, HTML5, CSS). Java Web Pages (JSP). Java on the Web. JSP/Servlet technology. PHP language, syntax, commands, processing, object-oriented PHP, REST architecture, etc.

Practical teaching

Practical exercises follow the presentation in lectures and introduce students to the design of dynamic websites through the following topics: Creating HTML, HTML5 pages. JSP/servlet technology. PHP request processing. Work with databases - MySQL, DAO. Sessions and cookies. MVC architecture. REST architecture, Development of a complete dynamic site according to MVC architecture.

Literature

[1] Robin Nixon, Naučite PHP, MySQL i JavaScript: razvoj dinamičkih veb strana korak po korak prevod 6. izdanja, Mikro knjiga, 2021, ISBN 9788675554578

[2] Matt Zandstra, PHP 8 objekti,obrasci i praksa objektno orijentisan pristup, Kompjuter biblioteka, 2021, ISBN: 9788673105680

[3] Robin Nixon, Learning PHP, MySQL & JavaScript, 6th Edition, O'Reilly Media, Inc., 2021, ISBN: 9781492093824

[4] Klausen Poul, Java 11: Web applications and Java EE: Software development, bookboon, 2017, ISBN: 978-87-403-1948-4, URI: http://hdl.handle.net/20.500.12323/3887

[5] Svekis, Laurence Lars, JavaScript : od početnika do profesionalca, Kompjuter Biblioteka, 2022, ISBN - 978-86-7310-580-2, COBISS.SR-ID – 75527177

[6] Stauffer Matt, Laravel: Up & Running: A Framework for Building Modern PHP Apps, 3rd Edition, O'Reilly Media, Inc., 2023, ISBN: 9781098153267

Number of active teaching classes: 5	**Theoretical teaching: 3**	**Practical teaching: 2**

Teaching methods

- a combination of classical teaching with E-learning and learning with the specified literature.
- doing homework
- in a room (computer classroom) equipped with a video beam and online access to the Internet.

Evaluation of knowledge (maximum number of points 100)

Pre-exam obligations	Points	Final exam	Points
Activities during teaching process	10	Final exam (written):	60
Practical teaching	/	Final exam (oral):	/
Colloquium	30		
Practical teaching	/		