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| Study program: Business informatics and e-business | | | |
| Course name: Business applications development | | | |
| Professor: Predrag Matkovic, PhD | | | |
| Subject status: compulsory course | | | |
| ECTS: 5 | | | |
| Requirements: Programming, Database | | | |
| Aim of the course Managing basic object-oriented programming. Acquiring advanced techniques for development of Windows based applications with special emphasis on database programming. Understanding characteristics and postures of current interface styles and familiarization with the philosophy of user-oriented development of business software interface with loaded and not-loaded clients. Acquiring basic knowledge on DOT.NET platform for development of generic, reusable components of business applications. | | | |
| Course outcomes Students acquire systematized knowledge on the development of business software through object-oriented development of generic, reusable components of business applications while adhering to the philosophy of user-oriented design of business software interface. | | | |
| Content of the course <i>Theoretical lectures</i> Basics of object-oriented programming (classes, objects, abstraction, encapsulation, polymorphism, inheritance). Application architectures (client-server, three-layer applications, n-layer applications) in business systems. Windows applications. Collaboration with other platforms - DOT.NET technology vision. SQL Server in the development of business software. Unique Modeling Language (UML) and business software development. User interface of business software - features and styles of current interface styles, human factors in user interaction with business software, attributes of interaction design, ways of evaluating design solutions, philosophy of user-oriented development of business software interface. <i>Practical course work</i> Case studies through development of object-oriented software in DOT.NET environment. | | | |
| Literature Oliver R. (2003), „Пројектовање ентерпрајз апликација“, Microsoft Press, превод на српски, СЕТ Computer Equipment and Trade, 2003. (Selected chapters) Spencer K. (2003), „ООП: Израда вишекратно употребљивих компоненти, Microsoft Visual Basic.Net“, Microsoft Press, превод на српски, СЕТ Computer Equipment and Trade, 2003. (Selected chapters) Boehm A., Mead G. (2011). Murach's ADO.NET 4, Database programming with VB2010. Mike Murach & Associates. | | | |
| Total number of active teaching classes | Lectures: 30 | Practical course work: 30 | |
| Teaching methods Presentations as part of standard lecture classes, presentation and analysis of case studies in smaller groups, workshops, and practice classes in the IT lab. | | | |
| Evaluation (maximum points 100) | | | |
| Pre-exam activities | Points | Final exam | Points |
| Active participation in lecture classes | 5 | Written exam | 25 |
| Active participation in practical course work | 5 | Oral exam | 20 |
| Colloquium 1 | 30 | | |
| Colloquium 2 | / | | |
| Term papers | 15 | | |