

# Mobile technologies for e-Business - opis przedmiotu

| Informacje ogólne   |                                                                   |
|---------------------|-------------------------------------------------------------------|
| Nazwa przedmiotu    | Mobile technologies for e-Business                                |
| Kod przedmiotu      | 04.2-WE-BizEIP-TechnMobwE-Bizn-Er                                 |
| Wydział             | <a href="#">Wydział Informatyki, Elektrotechniki i Automatyki</a> |
| Kierunek            | Biznes elektroniczny                                              |
| Profil              | praktyczny                                                        |
| Rodzaj studiów      | Program Erasmus pierwszego stopnia                                |
| Semestr rozpoczęcia | semestr zimowy 2022/2023                                          |

| Informacje o przedmiocie        |                                                                       |
|---------------------------------|-----------------------------------------------------------------------|
| Semestr                         | 4                                                                     |
| Liczba punktów ECTS do zdobycia | 4                                                                     |
| Typ przedmiotu                  | obowiązkowy                                                           |
| Język nauczania                 | angielski                                                             |
| Sylabus opracował               | <ul style="list-style-type: none"><li>dr inż. Robert Szulim</li></ul> |

| Formy zajęć |                                         |                                        |                                            |                                           |                     |
|-------------|-----------------------------------------|----------------------------------------|--------------------------------------------|-------------------------------------------|---------------------|
| Forma zajęć | Liczba godzin w semestrze (stacjonarne) | Liczba godzin w tygodniu (stacjonarne) | Liczba godzin w semestrze (niestacjonarne) | Liczba godzin w tygodniu (niestacjonarne) | Forma zaliczenia    |
| Wykład      | 15                                      | 1                                      | -                                          | -                                         | Zaliczenie na ocenę |
| Projekt     | 30                                      | 2                                      | -                                          | -                                         | Zaliczenie na ocenę |

## Cel przedmiotu

To familiarize students with the problems of using, functioning and designing applications for mobile devices.

Developing basic skills in the implementation of the user interface and transactional techniques on mobile device platforms.

## Wymagania wstępne

Fundamentals of object oriented programming

## Zakres tematyczny

Applications for mobile devices built in the form of websites. The issue of scaling content to the capabilities of the device. Limitations of this type of solutions.

Possibilities of dedicated applications built for modern operating systems installed in mobile devices such as Android, iPhone and Windows Mobile.

Basics of application programming for the Android operating system. Key application development components and programmer tools provided by operating system manufacturers.

Programming the user interface for the application on the mobile device. Automatic interface adjustment to the device capabilities and arrangement of elements on the screen. Support for external data sources, data update on mobile devices. Internet communication. Run time-consuming operations in the background. Communication between different modules in the system.

Models of application commercialization for mobile devices. Application distribution possibilities for mobile devices. The use of official software distribution channels proposed by operating system manufacturers, such as Google Play Store.

Examples of the use of mobile technologies in e-business such as payment systems, sales systems, ticket booking, etc.

## Metody kształcenia

Lecture - conventional lecture using a projector.

Project - practical classes in the computer laboratory.

## Efekty uczenia się i metody weryfikacji osiągnięcia efektów uczenia się

| Opis efektu                                                                                | Symbole efektów | Metody weryfikacji                                                              | Forma zajęć                                             |
|--------------------------------------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------|---------------------------------------------------------|
| Is aware of the opportunities and threats posed by publicly available mobile applications. |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul>          | <ul style="list-style-type: none"><li>Projekt</li></ul> |
| Has basic knowledge of human-computer interaction in applications for the mobile platform. |                 | <ul style="list-style-type: none"><li>sprawdzian z progami punktowymi</li></ul> | <ul style="list-style-type: none"><li>Wykład</li></ul>  |
| Can compile, run and test a self-written application on a mobile platform                  |                 | <ul style="list-style-type: none"><li>przygotowanie projektu</li></ul>          | <ul style="list-style-type: none"><li>Projekt</li></ul> |

| Opis efektu                                                                                    | Symbole efektów | Metody weryfikacji                                                       | Forma zajęć                                               |
|------------------------------------------------------------------------------------------------|-----------------|--------------------------------------------------------------------------|-----------------------------------------------------------|
| Is able to define priorities for implementing the mobile application                           |                 | <ul style="list-style-type: none"> <li>przygotowanie projektu</li> </ul> | <ul style="list-style-type: none"> <li>Projekt</li> </ul> |
| Is able to implement an application project for a mobile platform independently and in a team. |                 | <ul style="list-style-type: none"> <li>przygotowanie projektu</li> </ul> | <ul style="list-style-type: none"> <li>Projekt</li> </ul> |

## Warunki zaliczenia

Lecture - test in writing and / or oral, carried out at the end of the semester.

Project - final grade is the weighted sum of grades obtained for the implementation of individual elements of the training course and the form of its presentation.

Final grade = 50% of the final grade of the lecture + 50% of the final grade of the project.

## Literatura podstawowa

1. Stark, J., Jepson, B., Building Android Apps with HTML, CSS, and Making Native Apps with Standards-Based Web Tools, O'Reilly, 2012
2. Annuzzi J., Darcey L., Conder S., Introduction to Android Application Development: Android Essentials (5th Ed.), Addison-Wesley Professional, 2016
3. Horton J., Android Programming for Beginners, Packt Publishing, 2015

## Literatura uzupełniająca

1. Harwani, B.M., The Android Tablet Developer's Cookbook (Developer's Library), Addison-Wesley Professional, 2013
2. Frederick G., Lal R. Beginning Smartphone Web Development: Building Javascript, CSS, HTML and Ajax-Based Applications for iPhone, Android, Palm Pre, Blackberry, Windows Mobile and Nokia S60, APress, 2010

## Uwagi

Zmodyfikowane przez dr inż. Robert Szulim (ostatnia modyfikacja: 06-04-2022 10:34)

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