

В роботі створений прототип інформаційної системи для обліку відвідування занять студентами, який дозволяє оптимізувати навчальний процес за рахунок автоматичного відвідування пар. В межах роботи створено web – додаток, основними функціями якого є: перегляд, редагування та створення пар, а також основних їх атрибутів (студент і предмет). Використано протокол IP.

#### Література

1. Документація Spring Framework. URL: <https://docs.spring.io/spring-framework/docs/current/reference/html/>
2. Документація ORM Hibernate. URL: <https://hibernate.org/orm/documentation/5.4/>
3. Методи аутентифікації та авторизації. URL: <https://sites.google.com/site/identifikaciataautentifikacia/ponatta-pro-autentifikaciju/metodi-autentifikaciie>

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## ANTIVIRUS SOFTWARE VERSUS MALWARE

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Antivirus software is a class of program designed to prevent, detect and remove malware infections on individual computing devices, networks and IT systems. It is originally designed to detect and remove viruses from computers, can also protect against a wide variety of threats, including other types of malicious software, such as

- Keyloggers
- Browser hijackers
- Trojan horses
- Worms
- Rootkits
- Spyware
- Adware
- Botnets
- Ransomware.

Antivirus software typically runs as a background process, scanning computers, servers or mobile devices to detect and restrict the spread of malware. Many antivirus software programs include real-time threat detection and protection to guard against potential vulnerabilities as they happen, as well as system scans that monitor device and system files looking for possible risks.

Antivirus software usually performs these basic functions:

- Scanning directories or specific files for known malicious patterns indicating the presence of malicious software.
- Allowing users to schedule scans so they run automatically.
- Allowing users to initiate new scans at any time; and
- Removing any malicious software, it detects. Some antivirus software programs do this automatically in the background, while others notify users of infections and ask them if they want to clean the files.

Malware, short for malicious software, is a blanket term for viruses, worms, trojans and other harmful computer programs hackers use to wreak destruction and gain access to sensitive information. It is the collective name for a number of malicious software variants, including viruses, ransomware and spyware. Malware is typically delivered in the form of a link or file over email and requires the user to click on the link or open the file to execute the malware. Malware will inevitably penetrate your network. You must have defenses that provide significant visibility and breach detection. In order to remove malware, you must be able to identify

malicious actors quickly. This requires constant network scanning. Once the threat is identified, you must remove the malware from your network.

Each type of malware has its own unique way of causing havoc, and most rely on user action of some kind. Some strains are delivered over email via a link or executable file. Others are delivered via instant messaging or social media. Even mobile phones are vulnerable to attack. It is essential that organizations are aware of all vulnerabilities so they can lay down an effective line of defense. The following is a list of some of the more common malware types and definitions

- Virus
- Worms
- Spyware
- Trojans
- Ransomware

Antivirus software is the most widely known product in the category of malware protection products; despite “virus” being in the name, most offerings take on all forms of malware. While high-end security pros dismiss it as obsolete, it’s still the backbone of basic anti-malware defense.

### References

1. 10 Best Antivirus Software [2021]: Windows, Android, iOS & Mac. URL: <https://www.safetydetectives.com/>
2. Malware and Antivirus: What’s the Difference? URL: <https://www.vipre.com/resource/malware-antivirus/>
3. Antivirus software (antivirus program) URL: <https://searchsecurity.techtarget.com/definition/antivirus-software>
4. Antivirus software. URL: <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=48320&section=4.1>
5. Virus vs Malware vs Ransomware: What’s the Difference in 2021? URL: <https://www.vpnmentor.com/blog/difference-between-malware-ransomware/>