

English Transcription

Wprowadzenie do aplikacji i rozwiązań opartych o Sztuczną Inteligencję i Microsoft Azure. Projekt #3
(https://www.youtube.com/watch?v=J_W88RXkb1A)

Martyna Jakubowska: As a part of the third project of Introduction to applications and solutions based on Artificial Intelligence and Microsoft Azure course, we have decided to create a web application. The project team consists of Patryk Guba, Kinga Kocoł, Aleksandra Kowalczyk, Martyna Jakubowska, Maxymilian Kowalski, and Aleksander Wodnicki. We are students of the 5th semester of Applied Computer Science at the Faculty of Electrical Engineering of the Warsaw University of Technology.

Martyna Jakubowska: Our motivation to create the web application was to create a solution that would help stop food waste. All the information of the complete project, such as project description, functionality, architecture diagram, and code can be found on GitHub.

Martyna Jakubowska: Now, we would like to present a short demo of our project.

Aleksander Wodnicki: Thank you so much for that introduction. To use the application we created, we have two options: either we can use the link in the project repository description on GitHub and go to the web application, or we can download the application's source code and run it from the terminal, and then enter the address displayed there in the browser.

Aleksander Wodnicki: We have created a set of sample receipts so that we can demonstrate how does our virtual fridge works – this set consists of as many as 79 receipts. A link to the drive where they are held has also been added on GitHub, from where it can be accessed.

Aleksander Wodnicki: Now let's move on to how our application works. The first functionality we would like to present is adding photos of receipts, from which products are extracted. To do this, we have to click on the *Add a new receipt* button. Next, we have to click the *Choose a file* button, and we look for the receipt we are interested in adding. After choosing it, we are clicking on the *Check* button. At this very moment, a receipt is being analyzed and after it's finished, all the products from it will show up on the right, and the red basket will be replaced by the photo of this receipt. As we can see, after the analysis is complete, a list of our products indeed appears on the side. As we will see, these products themselves appear in our fridge. From it, we can observe them and read the expiry date of each product separately – this date is assigned depending on the product's type.

Aleksander Wodnicki: Let's check it by returning to the home page and selecting the top button, which is *What is in my fridge?*. Please note that the products are sorted so that those with the shortest use-by dates appear at the top of the lists for the user to pay particular attention to.

Aleksander Wodnicki: In addition to adding products using a receipt, the application allows you to add products manually. All we have to do is to fill in a simple form, which we will see after clicking on the *Add new product* button. We have to provide the name of the product and its expiry date. Let's call this product *Example Product* and set the *Expire date* to April 22nd. As we will notice in a moment, a new product appears in the fridge immediately after pressing the *Add product* button visible under the form. And after selecting it, we can locate this product right here.

Aleksander Wodnicki: Finally, we are left with the question of how this innovation can be implemented. The first idea would be that every shop could have the same names for each and every product. In this case, our application would recognize every product and could be used in every shop and would be based on only one *Products Dictionary*.

Aleksander Wodnicki: Note that many shops have their own applications. For example, Lidl's application allows us to store our receipts. It would be really easy to add our module to their application. At this point, customers could automatically update their e-fridge in their application.

Aleksander Wodnicki: We have one more idea that might help everyone control products' expiry date even if a person doesn't have a smartphone or a computer. During scanning of groceries, the system could sort products by expiry date. Then, such a person could take a look at the top of the receipt and will know which products are to expire first.

Aleksandra Kowalczyk: Thank you for following the demo of our project and we encourage you to test the application. The link to GitHub where you can find the source code and descriptions mentioned at the beginning has been placed in the description of the video. Thank you!