Hello, my name is Radoslaw Rezler and I am a student at North East Scotland College. This video is a part of my Graded Unit project for HND Software Development program. Within the next 10 minutes, I will demonstrate how to install the program I have created and show all of its functions. Additionally, I will present the internal folder structure that I have created and discuss the important parts of my program's code. 1

Let's start by unpacking the folder that I provided in the developing stage of this project. We can see exactly that folder on the desktop. To unpack it, we right-click on it and select "extract all" from the drop-down menu. Then we click on the "extract" option. After unpacking, a new folder will be created on the desktop, which will be opened by default. 2

In the newly opened folder, we can see two more folders and a text file. According to the instructions that I added when uploading the zip file, we should first open the read\_me file. It contains a brief description of the application, my details, and importantly, the path to the technical documentation that describes everything I will show in this video and much more. The mentioned documentation is important because it allows you to get oriented in the folder structure and find all the necessary files, as well as understanding the features of my program. 3

The two remaining folders that we can see on the screen contain my application and its additional documents. They differ in purpose - they are directed towards different target groups. The first folder contains files intended for the end-user of the application, while the second one is a developer version of my program that includes extended technical documentation and the source code of the program. 4

Let's open the consumer version folder. It contains the installation file, and it's basically all we need for the application to function correctly. This is the file that should be provided to the end-user. However, considering that school computers may not have the ability to install files directly into the program files directory, and such an installation is required for my program to work, I also include the "YourBestPet" folder that is visible here. It is an exact copy of the folder that would be created during installation in the program files directory on the C drive and contains both my program and the second technical documentation document - the user manual. 5

Now, let's install my program. When creating this program, I had in mind reaching the widest possible audience. That's why I created an installer similar to all the others that most Windows users have encountered. This is an important part of my project. It wasn't on my priority list, but I think it's an additional plus to the overall project and an extra layer of complexity that allowed me to work with tools I hadn't encountered before. Essentially, we click on the installer icon, and then twice on the "next" button. After it finishes, the "finish" button will appear. Let's click it. 6

As we can see, two new files have appeared on the desktop. One is a shortcut to open the application and the other is the user manual - the second part of the technical documentation mentioned earlier. These two files are the only ones available to the end user. They refer directly to those installed now in the program files directory and can be found there in case of loss. This way, an ordinary user of the program does not have access to any other documents or source code, which are intended exclusively for my client. Therefore, they cannot modify the code and change the information displayed by the application. 7

It's time to present my application. There are many ways to open it, so in case of any problems, please refer to the read\_me file mentioned before. However, let's assume that the program has been installed correctly. To open it, simply click on its icon on the desktop. I won't go into the user manual file, as I believe that both technical documents speak for themselves and are available to read. Instead, I will show all the functions of my program, and then any additional features included in the developer version. 8

The application window has been successfully opened. Before I go into detail about all of its features, I would like to briefly explain what kind of application I am presenting today. I believe that the best way to find inspiration for such a complex project as a graded unit is to look around. Ideally, one would find a real-life problem that could be reduced or eliminated through a simple implementation of new solutions. In my case, the problem is the improper, unplanned purchase of pets, and the solution is this application. The problem of animal homelessness, mistreatment, or poor selection and the subsequent consequences are wide-ranging. Therefore, I created an application that will not only help find the most suitable pet for everyone who answers a few questions, but also provide all the necessary knowledge for responsible purchasing and subsequent care. This application has a few unique features compared to similar products on the market, and I think that if it contributed to saving even one animal, it would be worth this project. 9

We now see the main window of the application. As we go through the different options, it becomes clear that the application is divided into three areas. There is a logo at the top of the screen, a middle section for user interaction, and a bottom area containing all the menu options. This makes the application intuitive, visually appealing, and practical, as all the options are always within reach. The page we are currently looking at is the welcome screen. It introduces the user and provides initial guidance. This window will disappear when any of the tabs below are clicked. 10

Let's click on the first option named Petbook. This is an encyclopedia of all dogs and cats that are in the application's database. Let's note that each animal is separated by a subtle color, has its own photo and a brief description. On the right side, there is a scrollbar that allows you to scroll the list down. Cats and dogs are separated by a distinct title. An additional detail worth mentioning is the change in the color of the petbook button, so that the user can see which page of the program they are currently on. This behavior of the menu buttons continues through all options of the application. 11

Let's move on to the tips section for now, as the next three options in the menu work in a similar way. As you can see, the general layout of the page remains unchanged. We have the top and bottom application bars unchanged, the tips button has changed color to active, and the middle section of the application has changed. It presents tips for pet owners divided into categories. There is a scrollbar on the side that allows scrolling. It's worth noting that the application has cohesive colors, separating individual tips and showing the title above them. This title is another important element of the application, and I'll mention it on the next card. 12

Here is one of the three quizzes in the app. It allows you to find your dream dog. As you can see, the title mentioned earlier is now different and will change again in the future, but that's not important now. Let's select three answers. And now let's say we changed our mind on some of them. As you can see, the buttons change color as they should. Additionally, clicking the button at the bottom is impossible because we haven't answered all the questions. Let's add the last answer. As you can see, the button has changed its name this time, telling us that we have to keep looking. Let's assume we don't have children. 13

Sure! We have a match now. Before us is a list of all the dogs that match us based on our answers. As you can see, this time not only their photo and description are visible, but also another important element that shows the complexity of the application's algorithm. We see our answers in the "Why this dog is good for us" section. Our answers have been compared for each dog individually and appropriately commented. In this case, all are a match, which shows that the algorithm is working. However, we will now change our answers to show a more complex case. Let's do it now by clicking again on "Dog Finder". 14

As you can see, the title this time is different, showing us clearly that the answers marked below are the ones we chose last time. Thanks to this, we can easily change, for example, only one of them. In this case, however, we will change all of them. 15

As expected, the list now consists of completely different dogs. The first one - bulldog - after analyzing our answers has the following ratings: higher, match, match. On the other hand, miniature schnauzer has much higher, match, and higher ratings. As you can see, the results may differ depending on the statistics of the dog, and therefore, the comment for each dog and each answer separately will also be different. Additionally, it could happen that for one of the dogs, one of the answers would be placed in the "why this dog is not a good fit for you" section. This would mean that it is still a good dog match for us, but it is not a perfect match. Each of our answers to each question separately can be evaluated as match, higher, much higher, lower or much lower. 16

The "Cat finder" works exactly the same as the "Dog finder". Therefore, I will not show it here. I will just mention that the answers to each quiz are saved separately, so if we return to any of them, we will see our previous choices. Of course, the "Cat finder" looks for cats instead of dogs. 17

Now let's open the last of the quizzes. Its difference is that it has more questions and a different form of answers. The remaining elements, such as saving answers or the inability to search before answering all of them, work the same as in the previous ones and there is no point in discussing them here. So let's search for the best pet for us. 18

And as we can see, this time we are shown a specific group or groups of domestic animals that best suit us. The description this time is much longer, which allows us to familiarize ourselves with important information and analyze our answers independently. I will now close the application to briefly show the code of my program. 19

The program code can be found in the developer version folder. It's worth mentioning that there is also a documentation 2 subfolder, as it contains both documents created for the developing stage and two other Python files. However, I will not discuss them in this video, as they are described in the mentioned documentation. 20

As you can see, the code contains extensive internal documentation. However, I opened it to show the last function of the program. Let's run the application from the code. Let's go to the quiz and answer the questions. As you can see, additional data is displayed in the console, which allows us to check the correctness of the function's operation. This data displayed in the console applies to each of the quizzes. 21

That's all I wanted to show today. I hope my presentation was clear and I have cleared up any possible doubts. If you have any problems, please refer to the documentation, whose location is described in the read\_me file. In the meantime, thank you and I wish you a successful use of the application! 22