**Documentation for project operating systems**

**The beginning of creating our own operating system.**

First we selected the team members.

The next step was to create a website to document our experience and practices in creating our project, document the workflow plan, the problems we faced, how we came up with solutions and where we went when we encountered errors.

Then we discussed how to create our own operating system, and the first steps were the process of searching for sufficient resources and references to explain to us the mechanism for starting our own project. These sources included Internet pages, YouTube and people with specialization in this field.

And we made a workflow to work on it, and divided the tasks among the team members, and the principle in this step was to trust the person accompanying the task.

 Then we worked together to analyze the sources collected and infer the steps to start the project, and information that helps us in preparing the appropriate environments and atmosphere to start and other information that helps us in the following steps and the appropriate tools to create a strong and coherent system.

We concluded that the first step is to prepare a fictitious environment to work on and download and test the operating system, and download the tools needed to work on developing the operating system, and we chose the virtual work environment Linux and the tools needed to work on it and download it effectively and we faced some problems in installing the appropriate tools and we have been using the sites Electronic, YouTube, and people who are effective with this environment.

Then we went to the next step of the steps that were concluded which is the creation of the boot system of the operating system, and we faced a lot of problems in creating the boot, in how to operate it and how to use the tools for the dummy system on it, and we resorted to searching for these problems via YouTube and websites and also people who use the dummy system To help us, we have completed solving these problems, but after a while it became clear to us that our Boot is not the bot we need, and we deleted it and re-created it again.

After the boot completion process, we went to the next step, which is the creation of the operating system Kernel, and it was completely created by the sources from which the information was collected and analyzed and the use of appropriate tools with the imaginary system to run the kernel has been run, then we went to the next step after the completion of the bot and Kernel, It is the process of linking the bot to the Kernel, and we encountered a problem here during the linking that is that the Kernel does not fit our Boot, so we resorted to deleting the Kernel and creating another Kernel, which is appropriate for our bot needs, and after research and consulting with specialists we were able to link between Boot and Kernel, Then we headed for operations on Kernel and we did Create calculator on Kernel.

We have tried our OS and It works perfectly now.

All of these efforts resulted in the creation of a simple operating system of our own, and we benefited a lot from the skills in this project, including effective communication between team members, acquisition of research skills, analysis skills, skills of dividing tasks between team members, taking responsibility and pressure.