Handout 4 (Unix-Style Access Control)

Access control is essentially about deciding whether to grant access to a resource or deny it. This sounds easy. Right? Well it turns out that things are not as simple as seem at first. Let us study as a case how access is organised in Unix-like systems (Windows systems have generally similar access control, although the details might be quite different).

Following the Unix-philosophy that everything is considered as a file, even memory or ports, access control is organised around 11 Bits that specify how a file can be accessed. There are three modes for access read, write and execute. Moreover there are owner, group and everybody else.