The goal of this thesis was to create a FTP client application named KarlFTP for mobile devices with Android OS. With KarlFTP we implemented a new approach in which users interact with this type of application by using background threads. Our application offers modern user interface and additional functions which enhance the user experience. The thesis contains brief description of functionality, design and implementation of the program. It also introduces some of the available applications and problems we have encountered while using them. The program was created for Android OS in Java programming language.