

# Taxtool in taxonomic software

[Technology](#), [Development](#)



Taxonomic tool (TaxTool) aims to provide an easy way for non-computer skilled people to use taxonomic software. This global scheme shows where the TaxTool is located and its role in the architecture of the taxonomic software. Fig xx: Location and role of TaxTool in taxonomic Software As we can see, TaxTool ensures the communication between the data and the user. This communication is done within an interface, which can call all the functions developed in the taxonomic service.

For presenting the TaxTool's development work, I will first tackle the construction of the interface (component used, main classes of the interface), then I will raise the part of the communication between data and TaxTool, and I will finish by the... Note: The present document is done for giving an overview of TaxTool but also for permitting to new developers to modify its quickly. That's why classes and interface construction are described in details.

1 - TaxTool's interface construction A good interface must be simple and easy to learn for the common user. That's why we choose to develop an interface close to a classic files explorer (e. g. Windows explorer) because most of users know well this interface. Here are the requirements we define in this goal: - Taxonomy elements (Taxon and Specimen) must appear as classic files for the user - Actions can be done in different ways - Users can see dynamically all the modifications he does These requirements have obviously strongly influenced the choice of the components for developing the interface.

For building its, we have mainly use java swing library. The Swing classes eliminate Java's biggest weakness: its relatively primitive user interface toolkit. Swing provides many new components and containers that allow building sophisticated user interfaces, far beyond what was possible with AWT. The old components have been greatly improved, and there are many new components, like trees, tables, and even text editors. Note: This part presents the development of the standalone application of TaxTool. Indeed, the final goal for the interface is to be integrating into Netscape through an applet but for testing, it's easiest to have a simple java application without applet communication.

The first thing to do has been to establish the base of the interface. How is the user is going to see data of the taxonomy, how can he trigger action? Thus, the following part describes the components chosen for the interface, the reasons why, and the way to construct them.