## Week 3-4: Building a HTI model for your Projet

In this model we will try to describe the structure of user tasks in the system. An understanding of the task structure will help us identify issues in the **current** task structure and design a system that supports or improves the user's current practice.

The ability to decompose goals and tasks into subtasks is a very important skill, not only for interface design, but also for programming (i.e., functional decomposition)!

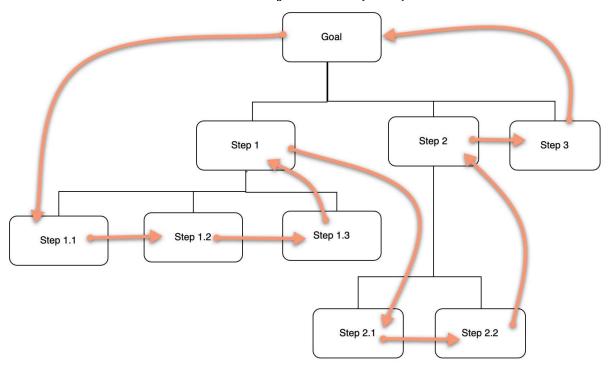
**ESSENTIAL Tip:** Make sure your model describes how things are **NOW** (i.e., **before** the new app is built)

Having a good understanding of the user's tasks will help make sure that your design does not miss any important steps. Task models do not just focus on what happens in a computer program, they should include any activity that is important to the work practice. In this part of the Project you will use a Hierarchical Task Inventory (H&P 6.6.3 - a break down of tasks into subtasks) to model user tasks

Review the UCD Interview Transcript and any data you may have collected for the project. Use a hierarchical task inventory (HTI) to demonstrate the task structure. A HTI shows the structure of a task by decomposing it into a series of subtasks. The HTI will help to reveal sets of functionalities that we will need to provide in the new interface and how they are related.

To start your HTI read the interview transcripts carefully then try to write a usage scenario that captures a typical user interaction with the system. From here you can then start thinking about the tasks the user has to carry out and order in which they occur. Are some tasks part of another task? If so then they are a subtask! When you have worked out a rough sequence, think about whether further decomposition is needed for any of the subtasks identified. Note: You can include your usage scenario as an appendix to this task.

One thing to keep in mind is how the HTI is read. See this example:



Step 1 is only completed when Step 1.3 is done. After that the user moves to Step 2.1 and continues the Step 2 subtasks until they are all complete, then they can move to Step 3. At the end of the last task the users goal is satisfied.

**Tip:** For complicated systems it may be impractical to show all subtask analysis on one tree. In this case multiple trees may be necessary. If you build more than 1 tree make sure that you make it clear to your reader how the trees are related.

Decomposition can be taken down to a very low level. You will need to make some decisions about which tasks to leave and which tasks to analyse in more detail. It is also important to make sure you start at the right level (i.e., something that is useful for the app development).