GIS software	Data hieararchy in comparison with GRASS GIS	Has startup screen? Is always displayed? How does it look like?	Features for enhancing first-time user experience
QGIS 3.14	**Project** - as GRASS workspace or location, project contains layers **Layers** in one project do not have one clearly defined directory as it is in GRASS GIS	**Yes**, always displayed. It has a startup screen but not as a separate dialog box. The News and selection of project are part of the main software window.	Welcome to QGIS window referring to QGIS website **Main software window** - informs a user about news **Info Bars** - general information and warnings for all users
gvSIG 2.5.0	**Project** - as GRASS workspace or location, project contains layers, similar to QGIS 3 **Layers** in one project do not have one clearly defined directory as it is in GRASS GIS	**No**, it does not have any startup screen. When started an empty map window opened.	**No features**, however everything is quite straghtforward.
ILWIS 3.3	The data is similarly to GRASS stored in one place in disk - in the **home directory called Data.** The imported layer is saved in Data directory as an ILWIS object with the * .ioc extension	**No**, it does not have any startup screen.	**No features**.
SAGA GIS 2.3	**Project** - as GRASS workspace, is created only when we save the settings to a SAGA GIS project file. Displayed **layers** do not have their given folder. They can be stored anywhere on the disk.	**Yes**, after the second start of SAGA GIS, a small selection dialog box appears. First start displays blank Map window. Options: Blank page, the last software state, last running projects	**No features.**

GIS software	Data hieararchy	Has startup screen? Is always displayed? How does it look like?	Features for enhancing first-time user experience
GRASS GIS 7.9 after GSoC	**Database** has the character of a directory containing Locations. **Location** (Project) defines in which coordinate a user work. It contains Mapsets. **Mapset** (Subproject) gathers GIS **layers** related to one project task.	**Yes**, but only if a mapset is not in a usable state (was deleted or is used by another process). In this special situation, GRASS starts in the same way as in the version 7.8.	**No features**. However, according to Survey 1 Question 1, improving the Data Catalog has enhanced the user experience, regardless of whether it is the first-time user or not.