# Guide Android team specializations:

**UI :** UI design, UI patterns, graphics design or collaboration with a graphics specialist in VM, user experience.

**Back-End:**  Determine how to host Guide’s files online (video, JSON, audio, picture). Maintain the servers and database. Others should be able to add/remove items from the database (in other words, update the JSON file), but this specialist is responsible for maintaining the integrity of the database.

**Unit Testing:** Test all non-UI classes (such as the Place class). If possible, design UI unit tests as well. Use standard Java/Android unit testing procedures and tools (see <http://developer.android.com/tools/testing/testing_android.html>). Report any bugs as issues on Github. This position will probably require close collaboration with the OOP & Algorithms specialist(s).

**Data Gathering:** Gather appropriate data for every field of every Place that Guide will have. This includes pictures, audio, video, descriptions, hours, categories, and any other field in the Place class. This role may involve collaboration with the AmbassaDores (Vandy tour guides).

**OOP & Algorithms:** Design utility classes for Guide. Examples include JSON parsing, Place class, Tour class. Use good design patterns in design of classes. Ensure proper threading is used when necessary, such as when pulling data from the Internet. Design/implement harder algorithms, such as the one for finding tour paths.