The purpose of data gathering is to collect sufficient, relevant, and appropriate data so that a set of stable requirements can be produced.  
  
**Data-gathering techniques**  
**Questionnaires.**Most of us are familiar with questionnaires. They are a series I of questions designed to elicit specific information from us. Well-designed questionnaires are good at getting answers to specific questions from a large group of people, and especially if that group of people is spread across a wide geographical area, making it infeasible to visit them all. 

**Interviews.** Interviews involve asking someone a set of questions. Interviews can be broadly classified as structured, unstructured or semi- structured, depending on how rigorously the interviewer sticks to a prepared set of questions. In the context of establishing requirements, it is equally important for development team members to meet stakeholders and for users to feel involved. This on its own may be sufficient motivation to arrange interviews. However, interviews are time consuming and it may not be feasible to visit all the people you'd like to see.

**Focus groups and workshops.**As an alternative or as corroboration, it can be very revealing to get a group of stakeholders together to discuss issues and requirements. These sessions can be very structured with set topics for discussion, or can be unstructured. In this latter case, a facilitator is required who can keep the discussion on track and can provide the necessary focus or redirection when appropriate. In the requirements activity, focus groups and workshops are good at gaining a consensus view and/or highlighting areas of conflict and disagreement.

**Naturalistic observation**. It can be very difficult for humans to explain what they do or to even describe accurately how they achieve a task. Observation involves spending some time with the stakeholders as they go about their day-to-day tasks, observing work as it hap- pens, in its natural setting. A member of the design team shadows a stakeholder, making notes, asking questions (but not too many), and observing what is being done in the natural context of the activity.

**Studying documentation.**Procedures and rules are often written down in manuals and these are a good source of data about the steps involved in an activity and any regulations governing a task. Other documentation that might be studied includes diaries or job logs that are written by the stakeholders during the course of their work. In the requirements activity, studying documentation is good for understanding legislation and getting some background information on the work. It also doesn't involve stakeholder time, which is a limiting factor on the other techniques.

**Table 1:  Overview of data-gathering techniques used in the requirements activity**

Table

Description automatically generated