**Features (Functional Requirements)**

* What things should the solution do?

*Ask the client to rank features into categories of importance.*

* + What needs to be searched?
  + What needs to be sorted?
  + Does anything need to be displayed?
  + Does anything need to be sent?

*This helps define features to be built, and help group the rest into different stages of development (scope).*

*Will help writing up requirements and context diagram.*

* Does the solution need to have permission levels/restricted access? *(Contains financial/employee information?)*
* How does the system currently work? What does it do
* **AND** what does the new one need to do [CHANGES]
* How should respond to anticipated error conditions/invalid inputs

**Constraints**

Technical Factors

* The speed of processing required? *How many clicks or seconds to complete a task?*
* How much disk space/memory is available?
* What are the limitations of the current hardware/operating systems?
* How and what types of files are shared between related systems? *(File formats must be compatible.)*
* What data needs to be encrypted?
  + How should it be encrypted? *(Password, single sign-on)*

Social Factors

* Level of expertise of users?
* Availability of technical support staff?
* Availability of equipment?
* Additional features to cater to physical impairment?

Legal Requirements

* What is the company’s privacy policy? *What must be done data-wise to adhere to this?*

Usability Factor

* In what specific ways should the solution perform?
* Ease of use of UI?

**Data Flow, Functions, and Output**

* **A set of raw data** (list of data needed to develop and test the solution)?
* What data needs to be stored? (Versus just calculated/used and disposed of)?
* When would the user need to…
  + Edit the data in the list?
  + Add new data to the list?
  + Delete data from the list?
* Any extra data sets coming from somewhere else?
* Will you need to search through the data – looking for what?
* Will you need to sort your data – based on what criteria will this be done?
* Will you produce an output – printed, onscreen, e.g. order form, sales summary etc.?
* Who else has input into their current system? External entities (third party e.g. suppliers, consumers etc.)
* How should data be validated? *What data should be accepted/rejected?*

**Other**

* Audience… describe the expected users…
  + Frequency of use
  + Subset of product functions used
  + Technical expertise
  + Security/privilege levels
  + Educational levels
  + Experience
  + Provides reasons why specific requirements are stated later in this doc.

**Purpose**

* For [target customer]
* Who [needs what]
* The [product name] is a [product catagory]
* That [key benefit, reason for use]
* Unlike [the current system…]
* This product [advantages of new product]

**Scope**

* Short desc. Of software incl…
  + Purpose (what is system is being covered)
  + Relevant benefits
  + Objectives
  + Goals
  + Relation to corporate goals/business strategies
  + What will and wont the software do!
* Operating environment
  + Hardware platform {laptop/desktop pc}
  + OS {windows NT (7 minimum)?}
  + Any applications to interface with? (excel as output?) any apps used on PC?
  + Physical location of users and hardware

**Design (Non-Functional Requirements)**

* How should it appear?
  + What should the layout look like?
  + General design?
  + Colour scheme?
  + What branding should appear?
  + Do they have a design language to adhere to?
* Who else may have input into the design/layout?
* Will users use the solution via mobile device or only desktop?
* Can the data be stored locally, or must be kept in the cloud?
* How fast must it respond (clicks to do things?)
* Must it be portable? {yes, in case move to ios}
* How robust… what inputs should be validated?
* Maintainability-- will the Op. environment change?
* Maint2-- Must the solution be updated frequently?