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 <u>input</u> 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?