­­­Outline of Software Requirement Specification

1. Introduction ( foreword )
   1. Purpose( brief intro the purpose of this specification and type of reader)
   2. Scope( application area, i.e. household, and do & not do)
   3. Definition/ Abbreviation/ terminology( STB smart trash bin )
   4. Reference????
2. Overview
   1. General Description( rough intro to STB, including parts and interface)
   2. Product Functions ( what can STB do, function of each part )
   3. User Characters ( the characters of expected users )
   4. General constraints (power, special bag, kind of rubbish…)
   5. Assumption and Dependences ( some premises involve the normal operation of STB: assume that user have no other sweep robot, assume that user can tolerate smelly odour, so on and so forth; And some circumstance involves normal operation of STB: user has trash to be thrown frequently, throwing the rubbish while his\her hands are dirty, user has large floor to be cleaned so on and so forth )
3. Specific Requirement ( all detail of STB)
   1. Overall system
   2. Functional requirement( specify input, process and output detail, for example, in auto sealing, how many times of pushing button you need, the sequence of process, handling exception, how long does it take to seal the bag so that the bin can open )
   3. External interface requirement
      1. User interface( sth. About button and sensor, strength of press, how high/low we to open the bin so on and so forth)
      2. Hardware interface( what kind of hardware we support )
      3. Software interface ( perhaps we don’t focus on software )
      4. Communication interface ( WIFI, TCP and some protocol for sweep robot)
   4. Performance requirement (how fast does the STB open? How fast does the STB need to seal? How many times can a set of bags be used? How much rubbish can the STB load? )
   5. Design constraints( size of STB, dimension, volume, strength of polyethene film so on and so forth )
   6. Attributes ( describe or explain security, reliability, maintainability so on an so forth)
4. Reference (you know la, but I suggest that we can mark the position of citation first, after we all have done, we offer number following order.)
5. Appendix