

# Solutions

## Chapter 5: Understanding project management: Documentation and backups

### Review, page 53

#### Identify

- 1 Verbal, written and visual.
- 2 Versioning, structured English code (pseudocode), ReadMe files, internal code documentation such as comments, changelogs and meeting notes.
- 3 Gantt charts, storyboards, mind maps, flowcharts, sitemaps.
- 4 There can be various approaches. This is a typical example:  
Son: new or changed data, called incremental backups.  
Father: a full back-up made of all data.  
Grandfather: long term backup such as monthly. There may be more than one of these over a few months.

#### Analyse

- 5
  - 0.5.1: unissued in-house prototype version 1
  - 0.5.2: unissued in-house prototype version 2
  - 1.0: first working version for public release
  - 1.0.5: minor modification or bug fix to version 1
  - 1.5: major modification or bug fix in version 1
  - 2.0: second working version for public release
- 6 Intrinsic commenting includes the use of variables with meaningful names, such as using the word counter instead of x for the number of times a program loop is executed. This assists the reader to determine the purpose and meaning of each variable in an algorithm.  
  
Internal documentation are comments that explain the purpose or features of code that follows. This assists readers to interpret the algorithm and its place in the overall code.  
  
A third type of documentation in code are the different colours of text as they distinguish between variables, functions, strings and keywords.

#### Research

- 7 Students' responses will vary.