CS310 Project: IT in the contemporary Church

Increment One

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   This is the planning document for the first increment of the PSALM program. PSALM is a provisional title for the program in my project. It stands for Personal Software Aid for Leading Music. This first increment shall lay the foundations of the song database, and include a first graphical user interface.

Requirements

- Store songs as lyrics together with chords.

    - The database should be capable of holding up to at least 300 songs.
    - The database must allow songs to be added, modified and retrieved for display.
    - The database should be searchable on song titles and lyrics.
    - Searches should not last more than a few seconds.
    - Chords must be marked specially for future transposition functions.

- Display songs (retrieved from the database) as lyrics together with chords

    - Chords should be displayed in the correct place, in a similar format to the song in figure 1. Chord letters may be placed above a word, above a gap before a word or above a gap after a word.
    - Text must be at least as clear and readable as the text in a songbook.

Future increments

Please note that the following issues will not be fully addressed in this increment, but left for future increments so that I can focus on the requirements stated above for this first increment. It is important though that I am aware that these issues will be added later, so designs should leave the possibility for these to be added.

Figure 1: An example of a song from a songbook.

- The GUI - The layout will only be a rough idea at this stage. It will be fully revised later, with HCI issues taken into account.

- Theme recognition and setlist functions will be added later. However, it will be necessary to keep these in mind when designing the database.

- Chord transposition - the database must be able to recognise what is a chord letter and what is lyric text, but actual transposition shall not be implemented in this first increment.

- The program will be aimed at users with varying levels of experience with computers. This means there should not be any more complex system configuration than necessary. For example, most users will not want to set up a database server. However, some may find it useful to import/export songs between common software packages used in the church context (e.g. SongPro). Although this first increment will not be designed for such a wide user base, the implications must be taken into consideration when designing

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the program. For example, an appropriate database system should be chosen with this in mind so that the database does not need to be re-designed in future.