

## **CSCI 188 Project Proposal**

### **Bible Reader**

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#### ***Project Abstract***

I am proposing a J2ME program which will allow the user to read the Bible from their phone. The user will be able to navigate to any chapter or verse. It will have an easy to use interface.

#### ***Strategy***

The program will use the CLDC/MIDP configuration and profile. I will attempt to use only MIDP 1.0 so I can be compatible with as many phones as possible. I plan to download the text of the book from the internet. The phone must have at least 5MB of flash RAM to store the text. It can be used in an emulator, but will work also with an actual phone.

I will need to use some persistent storage to store bookmarks and favorites.

#### ***Unknowns & Problems***

I am still unfamiliar with much of J2ME so many parts will be new. The web interaction or bringing down the text is the first new ground. I don't anticipate that being too difficult. I have not yet implemented persistent storage, so I will face the learning curve associated with that. Many of the advanced data structures of Java I am unfamiliar with. I will need to at least investigate these in order to store the book the most efficient way. I would like to at least investigate some sort of compression with my project. This is another unknown.

#### ***Implementation Plan***

The first step of implementation for the program will be interacting with the web. I will need to learn the API's associated with internet interaction. I will then need to parse the contents of the download. This is a heavy task because the textual content is significant. The text file will be around 4.2 MB. The text will need to be stored in data structures that are optimal for access. The next step is displaying the content on the screen in a favorable way. This will require a means for paging forward and backwards. I will also want to supply a way to jump to any particular verse or chapter and display that verse only. I would like to also provide the option for the user to store favorites and a bookmark option to ease use of the application.

I would like to supply some kind of compression that will keep the size of the text file minimized in memory. Through implementation I will come up with a good solution for compression.

I will provide help information that will guide the user through the application if they're in need of assistance.

## Project Proposal

### **Preliminary Class Outline:**

TextDownload Class  
Parser Class  
UserInterface Class  
[Possibly] Compression Class  
Content Class

### **Preliminary Schedule**

Week 7 – Basic user interface with options for navigation.  
Week 8 – compression investigation  
Week 9 – I hope to have the text on the phone  
Week 10 – Ability to navigate to a chapter/verse  
Week 11 – Error checking for out of bounds or invalid input.  
Week 12 – Extensibility implementation  
Week 13 – testing  
Week 14 - Demonstration

### **User Interface**

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Welcome to the Bible Reader!

- o Go to Verse or Chapter
- o View Bookmarks
- o How to Use
- o About

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### **John chapter 3**

<sup>16</sup> For God so loved the world,  
that he gave his only begotten  
Son, that whosoever believeth  
in him should not perish, but  
have everlasting life.

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