CS 401-001: Capstone Proposal Document

Tammy Busche

The Choice Is Yours, v.0.2

Android Mobile Application

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Revisions

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Draft 0.1	Tammy Busche	Project proposal and design concepts presented	12/09/22
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Review & Approval

Requirements Document Approval History

Approving Party	Version Approved	Signature	Date
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Contents

1. Introduction

1.1 General Description

The Choose Your Own Adventure book series was popular among youths in the 1980's to the mid 90's. The interesting aspect of these books is that they are not read linearly the way conventional books are. Instead, the reader is the character of the book where it's read in short sections. At the end of each section, there is a **turning-point** where the reader is provided two (2) choices on how to proceed with the story. This story genre is referred to as a **gamebook**.

For this software project, a mobile application will be designed to mimic the reading experience of a gamebook short story.

1.2 Objective/Purpose
- To transcribe story sections and corresponding images into a data structure which will be stored locally on the user's device.
- To create an interactive display where the user can read story sections and accompanying images using the touchscreen to scroll through the section content.
    - o Include a menu that will allow the user to begin/restart a story from the beginning, resume a story from a bookmark, exit the application, clear/delete saved data, access miscellaneous options, and (optional, see below) download new stories.
- Introduce a turning-point at the end of each section and provide the user with two (2) options to choose from.
    - o Include an interactive control where the user can select the next story section for story progression.
- Allow the user to re-read the story so that they can experience different story sections and endings.
    - o Allow for a **fast-forward** option to quickly scan or skip sections previously read while following other story paths.
    - o Highlight previously used turning-point choices so that the user can more easily navigate to unread material.
- Include **bookmarks** so that the user can stop and return to the "current" section and resume reading when the application is exited.
- Save progress for completed reading paths of the story.
    - o Although there is a single beginning, there will be multiple endings (greater than 20 possible **story paths**).
    - o Include a menu option where the user can visualize story paths completed via a **story map**. Refer to figure 1.

- In the story map, include a short synopsis of completed stories that summarizes previously chosen turning-point decisions and consequential story progression.
- Design the application so that stories can be **plug & play**.

1.2.1 Optional objectives

Create an online repository for gamebook stories.
- Design a master library for storage of all stories of other documentation that the designer/s may need access to.
- Have an administrative account to upload and organize stories and other documents for users to access.
- Design user accounts that can populate an individual user's online library.
    - Use document permission settings to allow for or restrict story access.

Add audio to the story files.
- Include sound effects complimentary to images used in the story.
- Record and include narration for stories.
    - Include a "Read Aloud" setting option for the user.

2. Problem Solution

Although reading and book applications have been popular as smart phones and tablets have become widely used, there are limited options available for downloads to read stories in a "Choose Your Own Adventure" format. An application devoted to this kind of story-telling method would help adults rekindle reading stories in this format as well as introduce the gamebook genre to a younger audience.

After examination of the book intended to be used for the initial software model, Choose Your Own Adventure 2 – "Journey Under the Sea" by R.A. Montgomery, it was noted what kind of options would be desirable, but unapplicable to the traditional book format. One desired option was to know the exact number of possible endings (story paths). Another was to have a method to keep track of what story content was new versus repeated. As development continues, additional desirable options may be noted and included in the released product.

3. Concept Specifications

3.1 Intended Audience
Children (age 7) to adult

3.2 Genre
Gamebook

3.3 Concept Details
Maintain portability of common document/book software so that the application is intuitive and ease to use. The novelty of the proposed application will be the varying story navigation, where the story is read in a second person perspective, the user is the "main character" of the story, and choice options are utilized to provide multiple reading experiences using a single plot.

4. Ethical Concerns

The original publisher for the Choose Your Own Adventure series was Bantam Books. For the initial design concept, books from the original series will be used to construct the framework of the application. Any subsequent release of this application should use original stories and images. The final name for the application itself should be different than the phrase, "Choose Your Own Adventure." Use of the original story and the title, "Choose Your Own Adventure," poses copyright infringement.

5. Technical Specifications

5.1 Intended Platform(s), Software Tools, and Programming Languages
Platform: Android
Software Tools: IntelliJ IDEA, Android SDK, Gradle
Programming Languages: Java, (Kotlin might also be used)

5.2 Key Features
– Presenting a reading format where the user is the main character and makes decisions for story progression.
– Availability of a story map.
– Potential use of audio elements to enhance the reading experience.

6. Appendices

6.1 Glossary of Terms

Gamebook – The genre for the Choose Your Own Adventure story format.

Turning-point – The end of a story section where the reader is provided options that determines the next section of the story.

Story path – The progression of the story according to the choices made by the reader. Refer to figure 1.

Fast-forward – A fast scroll/page down option for redundant sections where the reader can access the story section's turning-point without having to re-read the section.

Bookmark – A save marker to resume reading when progress is interrupted.

Plug & play – The concept for reading different stories where the story would act as a "plug" into the application and may be interchanged with a different story.

Story map – A visual representation of completed story paths. Refer to figure 1.
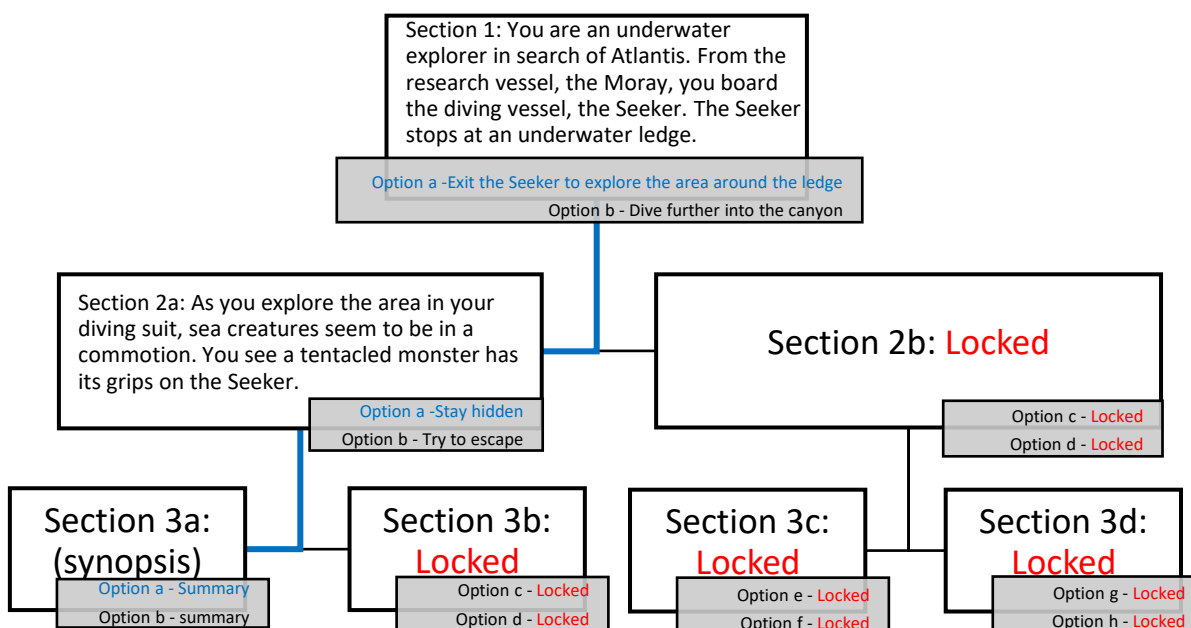
6.2 Story Map Diagram

figure 1: **Story Map** hierarchy representing story path progression over three sections. Two options are provided to the reader at the end of each story section. This example highlights where the reader might choose Option (a) at each turning-point displayed at the end of each section.