


De La Salle University
College of Computer Studies
Software Technology Department

CCPROG1 Machine Project 1T AY2020-2021
Choose Your Own Adventure

Background:
Before Visual Novels were created, books were the best place to find so many kinds of stories. One such style of story telling was done where the reader could choose how the story would progress. These books were known as “Choose Your Adventure” books. As you read through the story, you would be asked what to do next. It would tell the reader the choices that he/she could make and what page to turn to to proceed. It gave the reader a sense of interaction and deciding how the story unfolds. These stories would have different endings ranging from good to bad.

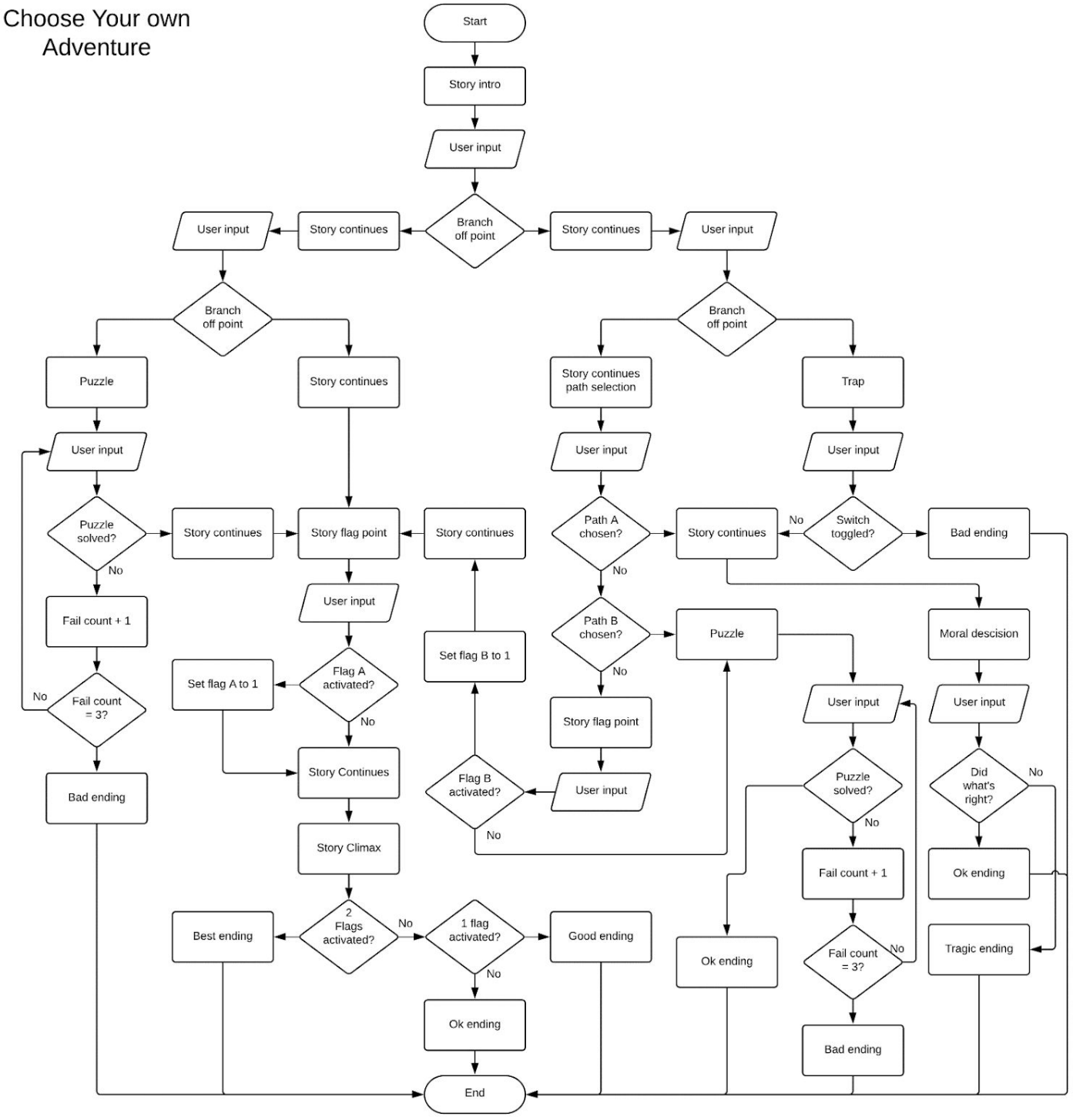
Mechanics:
The user would read the story and will be given choices throughout. Depending on the user’s choices, the story can end in different ways. Certain points of the story will have the user solving puzzles, finding clues or switches or items, and trying to avoid traps that may lead to a bad ending. Will they be able to get the best ending though?

Specifications:
The game will start with the introduction to the story explaining the situation to the user. At certain points, the user will be given choices on which way to proceed. Choices will be done via selecting by numbers or letters only. If you decided to use letters, make sure that the program accepts small or capital letters.

Example:
1- Go into the cave
2- Look for survivors
OR
a- Go into the cave
b- Look for survivors

The user should encounter a minimum of two(2) puzzles during the story. There must also be instant traps laid out in the story where the user will be given a decision that may either lead to a bad ending or to proceed further. There must also be at least two(2) flag points in your story. Example of flag points in a story is where the user is given a decision to either hit a switch or pick up an item or just ignore it. These points should have an effect in the story later. The story should have at least nine(9) different endings with 1 of them being the best/secret ending.

Sample flowchart for the game:



It is expected that you will make use of all the following in this project:

- User-defined functions
- Pointers
- Loops
- Conditions

For random number generation, refer to https://www.geeksforgeeks.org/rand-and-srand-in-ccpp/ on how to use rand() and srand(). This is only if you want to use random numbers in your project.

Submission & Demo

- Submission will be done via Canvas. No project will be accepted anymore after the deadline and the grade is automatically 0.
    - Requirements: Complete Program
        - Make sure that your implementation has considerable and proper use of variables, user-defined functions, conditional statements, and loops as appropriate, if it is not strictly indicated.

Documentations and coding standards:

1. Follow coding standards.
2. Include internal documentations.
3. Include function specifications in the source code. Before each of your functions, include the comments containing function specifications. Follow the format below.

```
/*
  Description:   what the function does
  Parameters:
      param1    what this param1 is for
      param2    description of param2
         :
  Return value:  description
 */
```

4. Create a Test Case document, save as PDF. For each function, identify appropriate test cases/scenarios. Test and validate your functions.
   Function: *function declaration/signature*

Test Description	Input value/parameters	Expected output/result	Actual output/result	Pass/Fail
Case 1 desc				P or F
Case 2 desc				
:				

5. Include a copy of your flowchart either in jpg or png format. Make sure to save it in a readable resolution so that even if you zoom in it is still readable.

Important Notes:

1. All source codes (with internal documentation and function specs) and Test Case documents (pdf file) MUST be uploaded in AnimoSpace before **January 25, 2021 (2359)**.

2. For all submissions made, the following are assumed:
    a. You worked on the entire project by yourself;
    b. the submitted files contain your original work; and
    c. you did not share a part or the entire source code to other people.

3. This is an **individual** project. Any form of cheating (working in collaboration, asking other person's help to accomplish a part or the entire MP, copying any code from another person's work or post) will merit a grade of 0.0 for the CCPROG1 and a discipline case.

4. You will present your project during a scheduled demo. The schedule will be announced later. During the demo, the submitted code will be downloaded, compiled, and executed.

5. Your solution must include use of functions, conditional, and iterative statements.

6. You will incur deductions when:
    a. The return statement used in a void function.
    b. Minimal use of user-defined functions.
    c. Features are either missing or not fully implemented, or instructions are not followed.

7. The following will automatically make your MP score 0:
    a. Not submitting before the deadline. AnimoSpace flagged your submission as LATE.
    b. Use of global variables.
    c. Use of keywords such as goto, continue, and statements such as System.exit().
    d. Calling the main() function to make the program execute again.
    e. Use of break statements in a non-switch block.
    f. No user-defined functions are used. Your program is just one big main() function.
    g. Compilation error encountered during the demo.
    h. No visible outputs on the screen.