

# Advanced Web Technologies CW2 Report- Adventure Nation

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**Keywords** – Advanced Web Technologies, CCG Index

#### 1 Introduction

What is Adventure Nation. Adventure Nation is a interactive site for text based adventure games were users can favorite games to their profile and play them from the click of a button on a Game card. The Home page allows a user

- Favorite an text based adventure game to have it saved to your profile
- Access the rest of the site via the integrated navigation via the button at the top left of the screen.

The text based adventure games(TBAGs) are loaded from a standardised formatted JSON file located in the static folder which means that any JSON file with the same formatting can be created and loaded to generator a completely custom TBAG. In future iterations of the site plan to allow for users to upload their own JSON files and post them to a feed.

**Extra Functionality** The Game cards have loaded images. The user can also Sign in to allow them to access the profile page(only accessible via navigation to users who are signed in) which will display the user's favorited game. In order to sign in the user would first have to create an account on the registration page.

# Home [AdventureNation] ext base adventi start [<game>] **URL Hierarchy** Point in text based

Figure 1: **URL Hierarchy** of web-app

pages that does not have a navigation bar is the Custom Error Page.

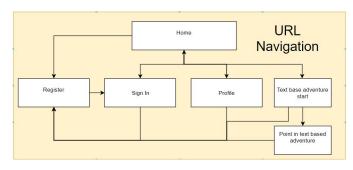


Figure 2: Page Navigation of web-app

### 2 Design

#### 2.1 **URL Hierarchy**

The URL Hierarchy branches from the home page into Sign in, Register profile and Situation; the hierarchy is designed like this as the subsequent pages only expand on what was displayed on the home page. Item also branches off of Situation as it shows specific game States from the TBAG currently being viewed. Each individual Story's in the story has buttons generate via the JSON files(OPTIONS list).

#### 2.2 **Navigation**

The user can navigate to most of the sites pages using the navigation bar with the only exceptions being the: sign in access to curated TBAGs that they can play. One of the

## JSON File Format

## Listing 1: JSON Format

```
1 [{
2
3
                                                                                                                                                                                                                                                                                                                                                      "Title": "Death",
                                                                                                                                                                                                                                                                                                                                                        "Text" "You have died... a blue glow emanates form the \hookleftarrow
                                                                                                                                                                                                                                                                                                                                                               darkness. you see that blue gem the liquid within glowing ←
                                                                                                                                                                                                                                                                                                                                                                and spiraling.",
                                                                                                                                                                                                                                                                                                                                                       "Options": ["Awaken", "Exit"]
                                                                                                                                                                                                                                                                                                                             7 Title": "Awaken",
7 "Text": "You awake in a crater the earth blackened and 
1-1 around you in your left hand is a ornate sword h
                                                                                                                                                                                                                                                                                                                                                              cracked around you in your left hand is a ornate sword hilt ←
                                                                                                                                                                                                                                                                                                                                                               of gold and blade of blue steel in your other a blue Gem \leftarrow
                                                                                                                                                                                                                                                                                                                                                               with what looks like a liquid held within. You could leave \leftarrow
page; registration page and Profile page. The Profile Page 8 can only be accessed by users signed in. The Profile Page 9 }, {

"Title": "Leave",

"Text": "You emerge from the crater. The world around you \leftarrow

"Text": "You emerge from the crater. The world around you \leftarrow

"Text": "You emerge from the crater. The world around you \leftarrow

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"Text": "Y
                                                                                                                                                                                                                                                                                                                                                               fully form the Crater you notice a rather large fellow, by \hookleftarrow
```

large i mean 30ft tall and by fellow i mean Giant. What do  $\hookleftarrow$  you do", 
12 "Options": ["Run", "Attack"] 
13 }, { ....

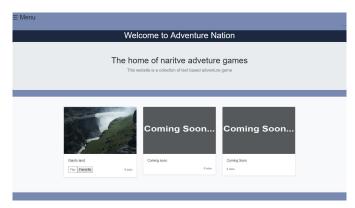


Figure 3: Home Page of web-app



Figure 4: Game Page of web-app

# 3 Enhancements

The profiles section is really bare and in future iterations it is planed to allow users to add profile images and bio's) also the introduction of tags to allow for users to see the basic identifiers of a story and perhaps sorting the TBAGs via them. The HTML pages themselves could be enhanced to some degree.

## 4 Critical Evaluation

Features that work well

- Navigation bar It functions as expected and looks professional.
- Game Loading It functions as expected
- Sign in and registration both function as expected.
- The home page Look professional.
- All pages are color blind suitable.

Features that work poorly

- The UI in the for the TBAG interaction could be improved massively
- The navigation out of the registration/Sign in page could have been implemented more in a more user friendly manor.

# 5 Personal Evaluation

The web-app was first created to allow users to play a TBAG and then subsequently built upon in order to add features such as a sign in and profile to hold a favorite. The goals I had set for the completion of the web-application were not fully meet, some features I had planned to implement such as allowing users to upload their own stories in the form of JSON files were not full implemented showing that an improvement in my time keeping abilities is still needed. The few challenges I faced were down to a lack of experience with sqlite3 and JSON, where later overcame by doing light research and tutorials. To conclude I fell as though I have preformed much better than I what i had first expected to and gained more experience with web-app development.



Figure 5: Error Page of web-app

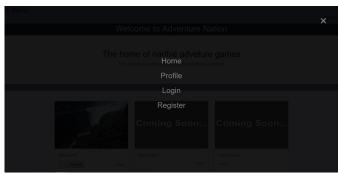


Figure 6: **Menu For navigation with user signed in** of web-app



Figure 7: Registration Page of web-app



Figure 8: **Sign In** of web-app