

De La Salle University

College of Computer Studies

Software Technology Department

**The Multimedia Terminal**

SOFTWARE REQUIREMENTS SPECIFICATION

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| **Date Submitted** | February 11, 2015 |

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1. **Executive Summary**

MGSK is a group of college students in De La Salle University – Manila; taking up a Bachelor’s Degree in Computer Science, major in Software Technology. The group was formed for a Web Application Development (WEBAPDE) course. The group exercises web application design as its main domain.

1. **Overview of the Business Process**

This chapter presents the process and goals of The Multimedia Terminal as a web application. Included in this chapter are the following items:

* Description of the process and business requirements
* Data requirements as part of the process.
* Different roles in the business process

**2.1 Existing Business Process**

The Multimedia Terminal’s process begins with the user. Any user can search the site for a work. If the work is not in the database, they may fill out a form to propose it to the site. The administrators then review each proposal and, if valid, add it to the database.

After works have been added to the database, registered users may now rate, review, and favorite these works. Adding a work to one’s favorites allows the site to give “taste recommendations” which are collective recommendations based on the user’s overall taste. Users who violate the terms and conditions of conduct of the site may be flagged by an administrator. Users may also recommend similar works or counter-recommend works that they think consumers of the work would dislike. To contribute to the other forms of association being done by the software, they may also add keywords or genres to be verified by an administrator. Regarding the creators of these works, users can also propose to add information about these creators, subject to the verification of the admins.

Finally, any users, whether registered or not, may search the site for works which may be done by genre, form of media, keywords, popularity, or cast/crew/developer team (for video games). This will show the work’s page. They can then view recommendations based on that work alone. Recommendations could be collated or sorted by user recommendation, keyword association, genre association, or creator association. They may also view counter-recommendations, but this will have mostly been determined through user counter-recommendation. This feature is the main crux of The Multimedia Terminal.

**2.2 Data Requirements**

A user provides his/her name, birthday, gender, e-mail, username, password for basic account information. They may then fill their profile with a profile picture, description, hobbies, interests, and favorite works list.

A work in general will have a title, keywords, genres, release year, poster/cover art/cover, and a five star rating. It will also have reviews. A work will also have creator data associated with them, but that varies between forms of media.

Movies and television share many similar traits such as writer/s, director/s, cast, crew, and rating, referring to the rating given by a ratings board from content screening. Television may have an end date as well as a list of episodes. Each episode has the information a movie has, plus a season/series and episode number. Anime and western animation will have similar attributes with movies and television with the addition of animation studios.

Books have an author, a publisher, and information on any other editions if available. It may also have word count as an attribute. Comics and manga will also have a publisher attribute, but will also have an issue/chapter number, volume number, as well as the writer/s and animator/s. Graphic novels have similar attributes sans issue number.

Theater works will have playwright, and date premiered.

Video Games have a developer company, consoles released on, and video-game specific genres.

Music will have band/artist information, album, and recording studio. Its genres will also be different.

Web Content will have a site URL, creator name/s, and may have organization affiliation e.g. YouTube Partner, Explosm, or Channel Awesome.

Creators will have a name, a basic bio, possibly trivia, if available, and a list of their works sorted by their affiliation.

**2.3 Roles in the Business Process**

Various users are involved in the process of The Multimedia Terminal. The roles of these users and their tasks are summarized in Table 2-1.

|  |  |
| --- | --- |
| Role | Description of Tasks |
| Casual User | * Search the site for various forms of media * by genre * by form of media * by keywords * by popularity * by cast/crew/developer team (for video games). * View general recommendations based on that work alone. * Collated * Sorted * by user recommendation * by keyword association * by genre association * by creator association * View counter-recommendations * through user counter-recommendation. |
| Registered User | * Search the site for various forms of media * by genre * by form of media * by keywords * by popularity * by cast/crew/developer team (for video games). * View general recommendations based on that work alone. * Collated * Sorted * by user recommendation * by keyword association * by genre association * by creator association * View counter-recommendations * through user counter-recommendation. * View taste recommendations * Rate a work * Review a work * Add a work to their favorites list * Recommend similar works * Counter-recommend works * Propose a new work * Add keywords * Add genres to a work * Add creator data |
| Administrator | * Search the site for various forms of media * by genre * by form of media * by keywords * by popularity * by cast/crew/developer team (for video games). * View general recommendations based on that work alone. * Collated * Sorted * by user recommendation * by keyword association * by genre association * by creator association * View counter-recommendations * through user counter-recommendation. * View taste recommendations * Rate a work * Review a work * Add a work to their favorites list * Recommend similar works * Counter-recommend works * Propose a new work * Add keywords * Add genres to a work * Add creator data * Verify work proposals * Verify keywords * Verify genres * Moderate reviews * Flag users * Verify creator data |

Table 2-1. User Roles and Tasks in The Multimedia Terminal

1. **Problem Analysis**

This chapter presents the findings of the investigation on the current state of cross-medium consumption needs and problems to be addressed by the software.

| **ID** | **Description** | **Cause** | **Symptoms** | **Impact** |
| --- | --- | --- | --- | --- |
| # | What’s the problem? | What causes the problem? | How do we know the problem exists? | Why is this important? What are the consequences? |
| 1 | Finding similar works of media to the ones you like is rather difficult at present. | * There is not centralized site where various data on different media can be integrated. | * Consumers have difficulty going from one form of media to another. * Consumers have difficulty finding similar works in one form of media | * Consumers usually stick to their comfort zone medium * Consumers don’t get what they want in other forms of media or even the medium they are used to |
| 2 | Recommendations for people are mostly limited in terms of accuracy and quantity. | * People do not know each other’s interests as well as they ideally should * Sites that offer this facility are limited to specific forms of media only | * Consumers receive limited recommendations. * Consumers receive inaccurate recommendations. | * Consumers get frustrated because they can’t find cross-media works that interest them |
| 3 | Transferring interest between mediums is more difficult for most consumers | * There is currently no dedicated facility for cross-medium recommendations. | * Consumers usually remain in their comfort zone medium | * Consumers miss out on possible interests in other media forms |
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The Multimedia Terminal is needed because finding similar interests, regardless of medium, whether same or cross-medium, is currently difficult unless a consumer visits multiple sites dedicated to the medium s/he wants to explore. The Multimedia Terminal allows the consumers to easily see what other people are recommending or how key ideas in their interests can be connected to similar works in other forms of media.

1. **Software Solution** 
   1. **Objectives**

The software aims to provide consumers with a way to find other works of media that might interest them, based on their current interests.

“The specific objectives of the software are as follows:

* To provide a facility for browsing through different works of media;
* To provide a facility for reviewing different works;
* To provide a facility for recommending different works;
* To provide a facility for providing keywords for different works to associate it with other works;
* To provide consumers with recommendations based on provided data.”

* 1. **Characteristics**

This software is intended to run on a web platform. It will be on a local server at first and it will mostly rely on user contribution and interaction. It will be reliable based on the algorithms used. It will be usable by different kinds of people due to its general appeal to consumers of different forms of media. It will be maintainable by easily being able to adapt other forms of media.

1. **User Stories**

This chapter presents the user stories included in the process of The Multimedia Terminal.

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| **User Story # 1:** A user (registered, admin) can log in to perform privileged actions. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 2:** A user (casual, registered, admin) can search the site to find media they are looking for. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 3:** A user (casual, registered, admin) can view recommendations based off any work to see other works they might like. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 4:** A user (casual, registered, admin) can view counter-recommendations based off any work to see other works they will most likely not like. | |
| **Estimate(Days):** | **Priority:** 30 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 5:** A user (registered, admin) can view a general recommendation based on their favorite works to see works that reflect their general taste. | |
| **Estimate(Days):** | **Priority:** 20 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 6:** A user (registered, admin) can give a work a rating to give other users an idea of its quality. | |
| **Estimate(Days):** | **Priority:** 20 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 7:** A user (registered, admin) can review a work to give other users a more concrete scale of the works quality. | |
| **Estimate(Days):** | **Priority:** 20 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 8:** A user (registered, admin) can add a work to their favorites to keep track of these works and to contribute to their taste recommendations | |
| **Estimate(Days):** | **Priority:** 20 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 9:** A user (registered, admin) can recommend a work from another work’s page to suggest other works that people might like as well. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 10:** A user (registered, admin) can counter-recommend a work from another work’s page to warn other users of works they may not like. | |
| **Estimate(Days):** | **Priority:** 30 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 11:** A user (registered, admin) can propose a work be added to the database to expand the scope of the database. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 12:** A user (registered, admin) can propose a keyword for a work to further associate it with similar works. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 13:** A user (registered, admin) can propose a genre to a work to further associate it with works in the same genre. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 14:** A user (registered, admin) can propose a creator’s page to further associate that creator’s works with each other. | |
| **Estimate(Days):** | **Priority:** 30 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 15:** An admin can verify proposed works to ensure the integrity of the database. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 16:** An admin can verify proposed keywords to ensure the integrity of the database. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 17:** An admin can verify proposed genres to ensure the integrity of the database. | |
| **Estimate(Days):** | **Priority:** 10 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 18:** An admin can moderate reviews to ensure the civil environment of the site. | |
| **Estimate(Days):** | **Priority:** 40 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 19:** An admin can flag aberrant users to maintain the civil environment of the site. | |
| **Estimate(Days):** | **Priority:** 40 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

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| **User Story # 20:** An admin can verify a creator’s data to ensure the integrity of the database. | |
| **Estimate(Days):** | **Priority:** 30 |
| **Pre-condition:** | |
| **Scenario:** | |
| **Post-condition:** | |
| **Acceptance Criteria:** | |

**Appendix A – Improved Process**

*This chapter presents the improved business process when the proposed software solution is implemented. This visualizes how the software solution benefits or affects the current business process.*

**Appendix B – References and Acknowledgement**

### This section allows you to properly cite all materials that you used, be these in the form of books or online resources. You must also acknowledge any person(s) and/or organization(s) you have interviewed or gathered the information from (name, position).

We would like to acknowledge Derek Banas for his tutorials on Web Design.