# MULTIMEDIA-BASED JAPANESE LANGUAGE LEARNING MEDIA AT SMK NEGERI 3 MAGELANG

**Siti Nadhiroh Winarni**[1]**, Wahyu Priyoatmoko**[2]**, Sri Waluyo**[3]

[1]*Information Systems of STMIK Bina Patria*
[2] [3]*Informatics of STMIK Bina Patria*
*Jl Raden Saleh no2 Magelang 56116*
*Email: nanichan35@gmail.com*[1]*, wepe817@stmikbinapatria.ac.id*[2]*,*
*sriwaluyo@stmikbinapatria.ac.id*[3]

**Abstract**

*Japanese language learning in 10th grade students of SMK Negeri 3 Magelang is already good, but the media used in learning Japanese is still less varied and does not attract students' attention in learning which makes students feel bored when the learning process takes place. The purpose of this research is to design and build Multimedia-Based Japanese Language Learning Media at SMK Negeri 3 Magelang, which is useful to facilitate teachers and students during Japanese teaching and learning activities. The methodology used in this study used the development method of Multimedia Development Life Cycle (MDLC) which is carried out in six stages, namely, concept, design, material collection, build, testing, and distribution. Design and building of Multimedia-Based Japanese Language Learning Media application at SMK Negeri 3 Magelang using Adobe Flash CS6, and supporting softwares in the form of Corel Draw X7 Adobe Photoshop CC. The results of the design and building of Multimedia-Based Japanese Language Learning Media Application at SMK Negeri 3 Magelang are the form of greetings (Aisatsu) for class 10 of Hospitality Accommodation Study Program.*

**Keywords** : *Learning Media, MDLC, Adobe Flash CS6, Japanese, Greetings (Aisatsu).*

**Abstrak**

Pembelajaran bahasa Jepang pada siswa kelas 10 SMK Negeri 3 Magelang sudah baik, namun media yang digunakan dalam pembelajaran Bahasa Jepang masih kurang bervariasi dan kurang menarik perhatian siswa dalam belajar yang membuat siswa merasa jenuh saat proses pelajaran berlangsung. Tujuan dari penelitian ini adalah untuk merancang dan membangun Media Pembelajaran Bahasa Jepang Berbasis Multimedia Pada SMK Negeri 3 Magelang yang berguna untuk mempermudah guru dan siswa selama kegiatan belajar mengajar mata pembelajaran Bahasa Jepang.Metodologi yang digunakan pada penelitian ini menggunakan metode pengembangan *Multimedia Development Life Cycle* (MDLC) yang dilakukan dengan enam tahap yaitu, konsep, perancangan, penggumpulan bahan, pembuatan, pengujian dan distribusi. Perancangan dan pembuatan aplikasi Media Pembelajaran Bahasa Jepang Berbasis Multimedia Pada SMK Negeri 3 Magelang menggunakan Adobe Flash CS6, dan s*oftware* pendukung  berupa Corel Draw X7 Adobe Photoshop CC. Hasil perancanagan dan pembuatan aplikasi Media Pembelajaran Bahasa Jepang Berbasis Multimedia Pada SMK Negeri 3 Magelang berupa materi Salam Sapaan (*Aisatsu*) untuk Kelas 10 Prodi Akomodasi Perhotelan**.**

**Kata kunci**  : Media Pembelajaran, MDLC, Adobe Flash CS6, Bahasa Jepang, Salam Sapaan (*Aisatsu*).

## 1. Introduction

Japanese language learning in 10th grade students of SMK Negeri 3 Magelang is already good, but the media used in learning Japanese is still less varied and does not attract students' attention in learning which makes students feel bored when the learning process takes place. The teacher's creativity in teaching is essential so that students do not have difficulty in learning Japanese language material, so that it can

increase students' interest in Learning Japanese Language. Based on the background of problem, the researchers designed and built multimedia-based Japanese language learning media of Greetings material (*Aisatsu*) for 10th grade students of Hospitality Accommodation Study Program at SMK Negeri 3 Magelang.

Limitations in building this learning media are syllabus and module book *Aisatsu* by Ida Sukriyah, S.Pd., where the material described is about Greetings material (*Aisatsu*) for 10th grade students of Hospitality Accommodation Study Program at SMK Negeri 3 Magelang. Where the data needed are in the forms of *romanji* letters, *hiragana* letters and translations in Indonesian language, this application was made using Adobe Flash CS6, the development stage employed *Multimedia Development Life Cycle* (MDLC), Japanese language learning media user platform of Greetings material (*Aisatsu*) used *desktop*, the output from the application is in the form of Japanese language learning media of Greetings material (*Aisatsu*) for 10th grade students of Hospitality Accommodation Study Program at SMK Negeri 3 Magelang in the forms of text, images, animation, audio, and video. And the Menu displayed including Main Menu, Basic Competency and Main Material, Material, Video, Guide, and Quiz. The main objective in building this application is to design and build multimedia-based Japanese language learning media of Greetings material (*Aisatsu*) for 10th grade students of Hotel Accommodation Study Program at SMK Negeri 3 Magelang.

## 2. Literature Review
a. Theoretical Foundation

According to Newby (in Wibawanto, 2017: 6), learning media is a medium for delivering learning messages which contain content to teach someone.

According to Vaughan (in Oka, 2017: 9) states that Multimedia is "A combination of text, images, graphic art, sound, animation, and video elements that are digitally manipulated".

The Japanese used three types of characters to read and write, viz *kanji, hiragana,* and *katakana*. Letters of *kanji* comes from the Mandarin letters and the shapes symbolize a concept that reaches 30000 letters. However, in 2010 the Japanese government has simplified the number for daily use of kanji by 2136 letters only (Zakiandini, 2018: 1).

Adobe Flash can be used not only for Web applications, but also can be developed to build desktop applications because in addition to be able to be formatted in .swf format, Flash can also be compiled into .exe format (Sunyoto, 2010: 1).

b. Previous Studies

A previous study that has built learning media includes Bintang, Budiwati, and Yuningsih (2016). The purpose of this study was to facilitate students in learning basic Japanese language by describing the basics that need to be learned in Japanese language, using the design model of Instructional Analysis, Design, Development, Implementation and Evaluation (ADDIE) developed by Riser and Mollenda (1990) assisted by Adobe Flash software which produces a Japanese Language Learning application for Vocational High School Students in West Java. The second study was conducted by Marpaung and Siagian (2016). The purpose of this study was to produce a learning media suitable to use in learning Indonesian language material for writing letters based on Macromedia Flash Professional 8 and to find out the benefits of developing the learning media for 5th grade students of SD Swasta Namira Medan.

This study used Research and Development (R&D) model of Borg and Gall, software Macromedia Flash Professional 8 which produced an Indonesian Language Learning Media application based on Macromedia Flash Professional 8 for grade V students of SD Swasta Namira. The third study was conducted by Sulasmoro (2016). The purpose of this study was to facilitate teachers in delivering material and increase the absorption of material by school students in learning Japanese language, especially materials of *Hiragana* and *Katakana* letters, using Research and Development (R&D) model of Borg and Gall, software Macromedia Flash 8 that produces Japanese Language Learning Media at SMK Mitra Karya Mandiri Ketanggungan Brebes.

The fourth study was conducted by Elnanda (2016). The purpose of this study was to assist teachers in conveying learning information to students in a good, attractive, and fun ways. This study employed Research and Development (R&D) model of Borg and Gall, software Macromedia Director MX which produces an Interactive Multimedia Learning Media application for SKI Subject for students at Perguruan Thawalib Putri Padang Panjang. The fifth study was conducted by Syafitri and Sari (2015). The purpose of this study was to introduce Japanese language to children by using two-dimensional animation that has interactive patterns with the presentation of images, text, and sound as an attractive tool for children to learn while playing. This study used Multimedia Development Life Cycle (MDLC) developed by Luther, software Adobe Flash, which produces an Interactive Japanese Basic Learning Media Application for Children. From the previous studies above, the difference is that this Japanese language learning media is for 10th grade students in the Hospitality Accommodation Study Program at SMK Negeri 3 Magelang, which contains Greetings learning material (*Aisatsu*). This application was created using Adobe Flash CS6. The method used in building this learning media was Multimedia Development Life Cycle (MDLC) developed by Luther.

**3. Research Methods**

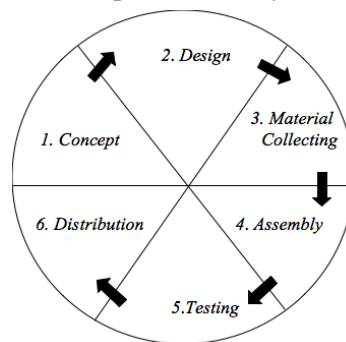This study used Multimedia Development Life Cycle (MDLC) method.



**Figure 1.  MDLC Model**
**Source: (Luther, 1994)**

Multimedia development is carried out based on six stages as in Luther's MDLC model (1994), namely:

a.  Concept
    This stage was carried out to determine, identify, and assign users as well as objectives in building this Japanese language learning media.

b. Design

At this stage, designing the Japanese language learning media was done *storyboard* in the forms of learning media display, program architecture, style, and learning media material requirements.

c. Material Collection

At this stage, material collection was carried out by collecting learning materials needed for building learning media like learning modules accompanied by supporting aspects such as pictures, audio, and animation.

d. Assembly

Assembly stage was the stage of arranging materials collected during material collecting stage which was then made into learning media based on the design stage.

e. Testing

At the testing stage, testing was done by using *Black box* testing on learning media built to test whether there were errors or not.

f. Distribution

At this stage of distribution, the learning media was, it was then served as a Japanese language learning media for 10th grade students of Hospitality Accommodation Study Program at SMK Negeri 3 Magelang.

## 4. Results and Discussion

a. The design of this system was made by using UML (Unified Modeling Language) which consists of *use case diagram*, *class diagram, state chart diagram*, *activity diagram*, and *sequence diagram.*
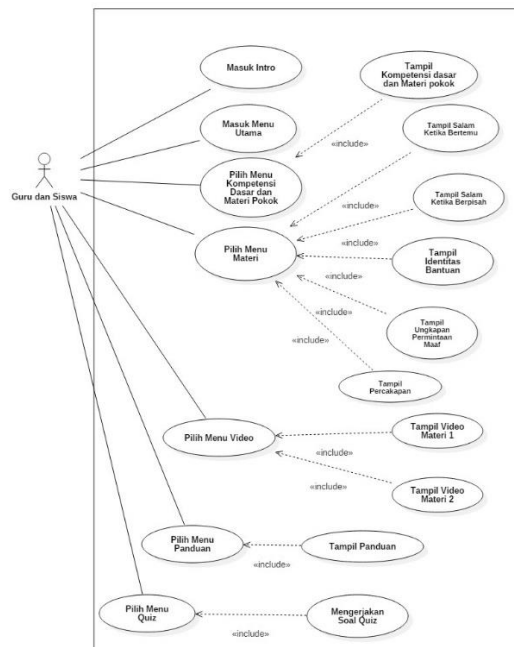
1) *Use Case Diagram* Design



**Figure 2 *Use Case Diagram***

Teachers and students as users who use this learning media application can view the menu list and choose the desired menu such as Basic Competencies and Subject Materials, Materials, Videos, *Quiz*, and Guide. The users can also view the contents of the menu selected and do the exercises on the Quiz menu.
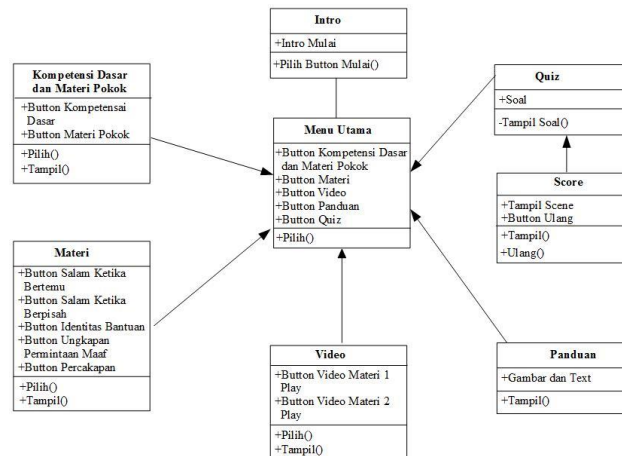
2)  *Class Diagram* Design



**Figure 3  *Class Diagram***

*Class diagram* consists of classes and relationships between other classes. *Class diagram* describes the structure of the system to be built.

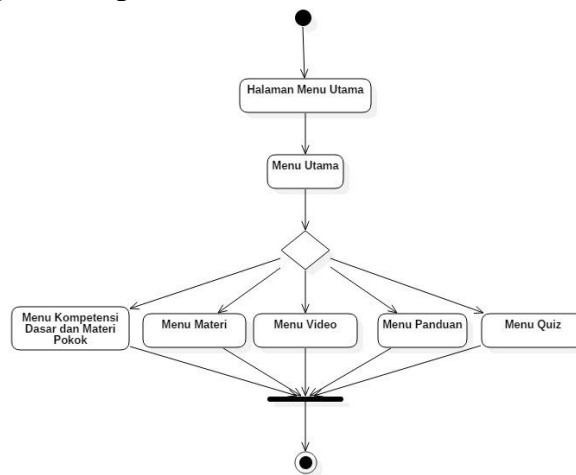3)  *State Chart Diagram* Design of Main course



**Figure 4  *State Chart Diagram* of Main course**

This state chart diagram of main menu is a process flow section that will be done by the teacher or students enter the main menu, then there will be Basic Competency and Main Material buttons, Greetings (*Aisatsu*) materials, videos, guides, and *quiz*.
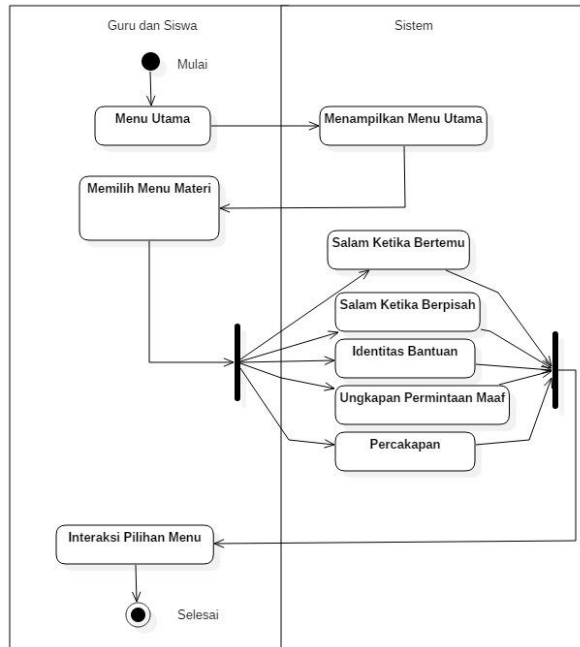
4) *Activity Diagram* Design of Material Menu



**Figure 5** *Activity Diagram* **of Material Menu**

*Activity diagram* of material menu options explains about the flow system of display material menu after the teacher or student enters the main menu page, then the teacher or student chooses the material menu. Then the teacher or student can interact with several material menu options such as greetings when meeting, greetings when separating, assistance identity, expressions of apology, and conversations. All material choices start from greetings when meeting, greetings when separating, assistance identity, expressions of apology, and conversations. Then the teacher or student can interact with the next menu option by pressing Main Menu button or exit by pressing Exit button.

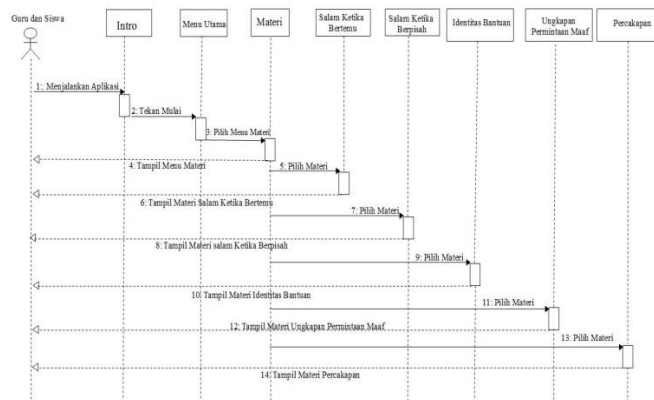5) *Sequence Diagram* Design of Material Menu



**Figure 6.** *Sequence Diagram* **of Material Menu**

*Sequence diagram* of Material Menu explains the process of displaying Greetings material (*Aisatsu*). *User* enter the next menu the user chooses the material menu so that greetings will be displayed when meeting material, greetings when separating, assistance identity, expressions of apology, and conversations. *User* can return to Main Menu.

6) Entrance Page Display



**Figure 7. Entrance Page Display**

7) Main Menu Page Display



**Figure 8. Main Menu Page Display**

8) Material Page Display



**Figure 9. Material Page Display**
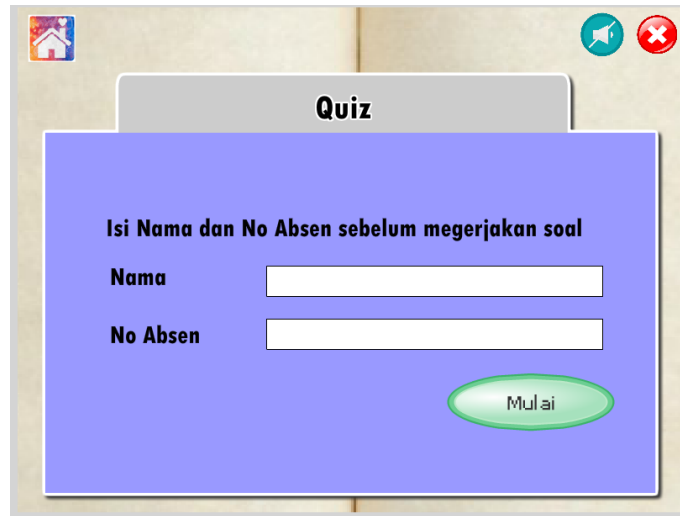
9) Quiz Page Display



**Figure 10. Quiz Page Display**

## 5. Conclusion

Based on the research has been done, it can be concluded that Multimedia-Based Japanese Language Learning Media at SMK Negeri 3 Magelang has been designed and built. By using this multimedia-based Japanese language learning media, it is expected that students can learn Greetings (*Aisatsu*) better and be able to attract students to be more enthusiastic in learning it. Multimedia-based Japanese language learning media is expected to become one of the supporting methods for teaching Greetings material (*Aisatsu*) for teachers during the teaching and learning process.

Future researchers are expected to build Japanese Language Learning Media Applications using different software such as Macromedia Flash and the method used can use <*bx id="3"/>*Instruction Analysis, Design, Development, *Implementation and Evaluation* (ADDIE).

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