



## Designing Web-Based Online Mading Application

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### ABSTRACT

The development of online magazine information technology in Indonesia has made a lot of progress, this has also been followed by technological developments in reducing paper use. Developments in the dissemination of event information have had a good impact on event organizers because by using e-mading information media, it is easier for people to find event information. Speed in obtaining easy information is one of the main requirements for obtaining information. A web-based online magazine information system is an option that is expected to help people find it easier to find information about an event they want.

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## 1. Introduction

The use of computer technology for the application of information and business systems is indispensable. One of its applications is the Internet as a very large public network (huge/widespread network), like that of an electronic public network, which is cheap, fast and easy to access. Using electronic data as a medium for conveying messages/data so that information can be sent and received easily and concisely, both in the form of analog and digital electronic data (Simarmata et al., 2021; Sudipa et al., 2020).

With the creation of the Internet network, communication becomes unlimited and without barriers, both geographical barriers and time barriers. The convenience generated by the Internet network has made it possible to create a Web-based Online Wall Magazine Information System (Mading) (Asri, 2014). The design of this online magazine information system application utilizes technology in the form of the web. Web technology is a technology that is very influential in aspects of the dissemination of event information announced by the organizers. The function of making as an information medium requires users to be able to read and access it easily and must always be up to date and can be justified for the truth (Rachmad, 2017), so that it can be made online by applying technology and using the internet to access information in production.

Online magazines are very useful in disseminating information internally, in addition to that, online magazines are expected to help improve digital literacy (Hadi et al., 2022) and increase interest in reading information so that it can be understood (Indera & Ramasudha, 2018; Utomo & Naldi, 2021). Several similar studies in making online magazines to facilitate the dissemination of information to students are (Kartina, 2021) this research is making online magazines so that students are more interested in reading magazines digitally than those that are still posted on walls, further research

(Hajah et al., 2021) Seeing the dissemination of information through wall magazines is less efficient and effective due to the lack of interest in reading through these magazines not only because they are less attractive but because of the frequent occurrence of damaged paper in these magazines by irresponsible parties. Other research (Novalia & Voutama, 2022) focuses on introducing the M-Magazine application to students and school teachers in a hybrid/semi-offline manner as a substitute for magazines.

This Web-based Online Magazine Design Application is not only a promotional medium that can promote an event in Indonesia. But it can also provide information in searching for event information online so that people can find out information directly. With an attractive online madding design so that it can be accessed web-based and easy to read via smartphone devices. The purpose of this study is to design an online magazine information system to make it easier to get information so that the dissemination of information can be as desired.

## 2. Method

### 2.1. Method of collecting data

In collecting data in order to achieve maximum results, the authors use the Observation method, namely observations made from online media to collect the required data.

### 2.2. Research Stage

On this theoretical basis, we will discuss the stages that will be carried out in research using the System Development Life Cycle (SDLC) development method which will go through several stages (Arrey, 2019; Ridwan et al., 2021), which can be seen in Figure 1 below:

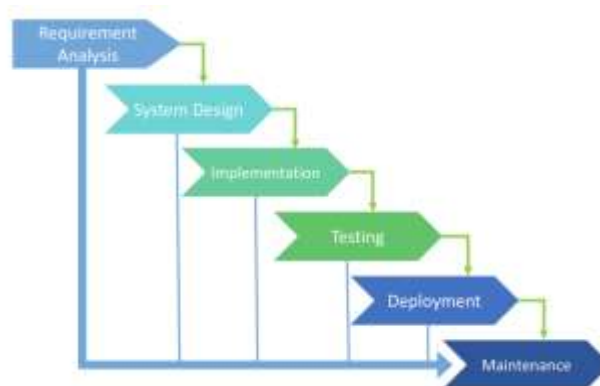


Figure 1. SDLC Method Stages

1. System Planning and Analysis
  - a. Collect the necessary data by means of observation by making observations through online media.
  - b. The application that is made only collects data from online media.
2. System Design
  - a. Database Design  
At this stage the table design consists of an image table and a login table.
  - b. Analyzing Objects and Functions in the System
3. Implementation System
  - a. Create a web-based online magazine application
  - b. Web based application
4. System Testing
  - a. Perform system functionality testing

The online magazine application uses an object-based design approach. There is a use case diagram design in designing processes that can be carried out by users on the system (Maylawati et al., 2018). The use case diagram for online magazines can be seen in Figure 2 below.

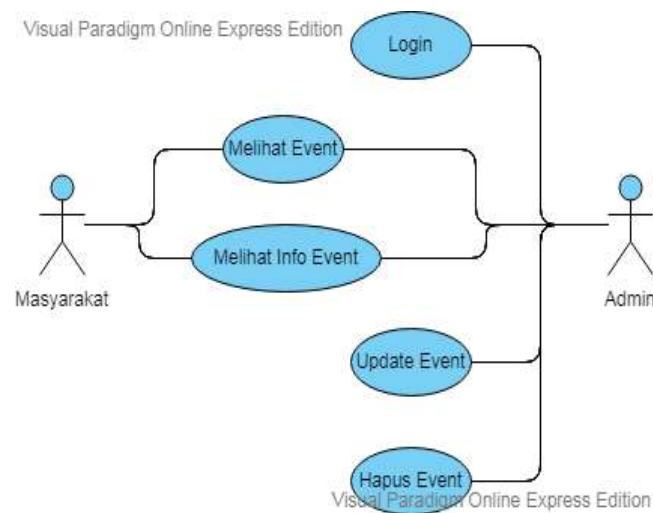


Figure 2. Usecase Diagrams

Use Case Diagrams for Users can be seen in Figure 2. Admins can see Home, View Events and view Event info. To manage data, the admin is required to log in first. After a successful login, the admin can perform data processing. In processing data, the admin can add, change, and delete data in admin data and event data.

### 3. Results and Discussions

#### 3.1. System implementation

Pada tahap implementasi dapat dijelaskan beberapa tampilan antarmuka dari aplikasi mading online berbasis web.

##### 1. Login Page

In this web-based online magazine Information System application, there is a login provided, namely the Admin login. Admin login is used for system managers to add, edit or print data owned by a property.

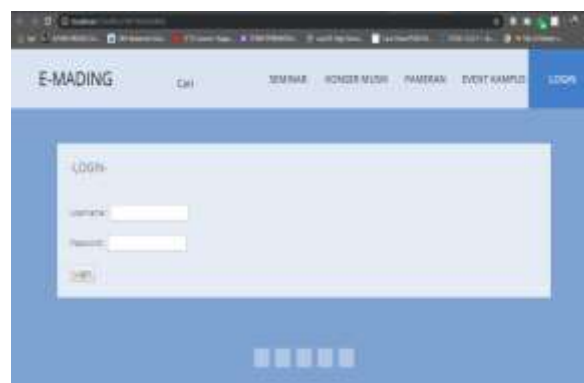


Figure 3. Display login admin

2. Dashboards Page

The following is a Dashboard display that can display event information data for admin purposes.



No	Judul	Tipe Acara	Kategori	Kategori Acara	Target	Waktu	Status	Detail	Penyedia	Estimasi	Aksi
1	Konser Musik "Road to Soundre Naline" dengan tema "The Spirit of All Time". Acara ini akan berlangsung pada tanggal 19 Juli 2019 di Gedung Sate, Bandung. Tiket akan dijual seharga Rp. 100.000.	Konser	Musik	Konser Musik	1000	19 Juli 2019	Selesai	Konser Musik "Road to Soundre Naline"	Konser Musik	1000	[Detail]
2	Konser Musik "Road to Soundre Naline" dengan tema "The Spirit of All Time". Acara ini akan berlangsung pada tanggal 19 Juli 2019 di Gedung Sate, Bandung. Tiket akan dijual seharga Rp. 100.000.	Konser	Musik	Konser Musik	1000	19 Juli 2019	Selesai	Konser Musik "Road to Soundre Naline"	Konser Musik	1000	[Detail]
3	Konser Musik "Road to Soundre Naline" dengan tema "The Spirit of All Time". Acara ini akan berlangsung pada tanggal 19 Juli 2019 di Gedung Sate, Bandung. Tiket akan dijual seharga Rp. 100.000.	Konser	Musik	Konser Musik	1000	19 Juli 2019	Selesai	Konser Musik "Road to Soundre Naline"	Konser Musik	1000	[Detail]

Figure 4. Display dashboard page

3. Home Page

The following is a home view that can display event information, for example: making music. along with filtering, event information.



Figure 5. Display home page

4. Filtering and Searching Page by area name

The following is a search display based on the name of the area that can display data when a user searches based on the name of the area. we took the example of choosing the Jakarta area.



Figure 6. Filter and Search by Name

5. Filtering and Searching Page by Date Range

The following is a search display based on date which can display data when a user searches based on that date. We took an example on filtering and search: July 15 – August 22 2019.



Figure 7. Filter and Search by Date

6. Filtering and Searching Page by Price Range

The following is a search display based on price which can display data when a user searches based on that price range. we took the example Price Range from 10000 – 300000.



Figure 8. Filter and Search by Price Range

3.2. System Testing

System testing uses the black box technique to find out that the overall functionality of the system is running well, and to test every system feature so that errors do not occur in the system (Hung & Anh, 2005; Tsai et al., 2021). Blackbox testing can be seen in Table 1 below.

Table 1  
 Blackbox Testing Results

Number	System Functional	Testing Scenario	Result
1	Login Page	System functionality is running well and as expected	Valid
2	Dashboard Page	System functionality is running well and as expected	Valid
3	Home Page	System functionality is running well and as expected	Valid
4	Filter and Search Page	System functionality is running well and as expected	Valid

3.3. System Maintenance

System maintenance is carried out to correct errors and improve the quality of the system.

#### 4. Conclusion

The conclusions obtained in building this online magazine information system are: (1) The information system can search the venue according to the community's wishes. (2) The information system can perform filtering features provided on the home page, making it easier for users to find event information based on Region, Price Range, and Date. For future implementation and development, the following suggestions are proposed: (1) This information system should be added to the system on Android. (2) This Information System should create a login page for the user to upload, update, and delete the data he inputs.

#### References

- Arrey, D. A. (2019). *Exploring the integration of security into software development life cycle (SDLC) methodology*. Colorado Technical University.
- Asri, Y. (2014). PEMANFAATAN TEKNOLOGI CLOUD COMPUTING DALAM PEMBUATAN EDITOR ONLINE E-MAGAZINE (STUDI KASUS PADA MAN 12-JAKARTA). *Jurnal PETIR Vol, 7*(2).
- Hadi, N., Hanafi, S., & Suherman, S. (2022). Pengembangan Media Pembelajaran Aplikasi Mading Digital Padlet untuk Meningkatkan Motivasi dan Budaya Literasi Siswa di Sekolah Dasar. *Jurnal Basicedu, 6*(5), 8614–8625.
- Hajah, Z., Darlis, D., & Nurmantris, D. A. (2021). Implementasi Mading Online Berbasis Web Menggunakan Framework Laravel Di Sdn 05 Surabaya. *EProceedings of Applied Science, 7*(6).
- Hung, D. Van, & Anh, B. V. (2005). Model checking real-time component based systems with blackbox testing. *11th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications (RTCSA'05)*, 76–79. <https://doi.org/10.1109/RTCSA.2005.59>
- Indera, I., & Ramasudha, H. (2018). Sistem Informasi Elektronik Mading (E-Mading) UKM dan Fakultas Ilmu Komputer IIB Darmajaya. *TEKNIKA, 12*(2), 57–63.
- Kartina, E. (2021). *Aplikasi Mading Online Untuk Politeknik Negeri Bengkalis Berbasis Web Menggunakan Metode Extreme Programming*. Politeknik Negeri Bengkalis.
- Maylawati, D. S., Darmalaksana, W., & Ramdhani, M. A. (2018). Systematic design of expert system using unified modelling language. *IOP Conference Series: Materials Science and Engineering, 288*(1), 12047.
- Novalia, E., & Voutama, A. (2022). Sosialisasi Aplikasi Android M-Magazine Solusi Sarana Mading SMA Negeri 5 Padang Selama Daring. *Jurdimas (Jurnal Pengabdian Kepada Masyarakat) Royal, 5*(2), 139–144.
- Rachmad, D. S. (2017). PERANCANGAN E-REMINDER AKTIFITAS MAHASISWA PADA FAKULTAS TEKNIK UNIVERSITAS BHAYANGKARA JAKARTA RAYA. *Jurnal Sistem Informasi Indonesia, 2*(1).
- Ridwan, M., Fitri, I., & Benrahman, B. (2021). Rancang Bangun Marketplace Berbasis Website menggunakan Metodologi Systems Development Life Cycle (SDLC) dengan Model Waterfall. *Jurnal JTIK (Jurnal Teknologi Informasi Dan Komunikasi), 5*(2), 173–184.
- Simarmata, J., Manuhutu, M. A., Yendrianof, D., Iskandar, A., Amin, M., Sinlae, A. A. J., Siregar, M. N. H., Hazriani, H., Herlinah, H., & Sinambela, M. (2021). *Pengantar Teknologi Informasi*. Yayasan Kita Menulis.
- Sudipa, I. G. I., Astria, C., Irnanda, K. F., Windarto, A. P., Daulay, N. K., Suharso, W., & Wijaya, H. O. L. (2020). Application of MCDM using PROMETHEE II Technique in the Case of Social Media Selection for Online Businesses. *IOP Conference Series: Materials Science and Engineering, 835*(1), 12059.
- Tsai, C.-H., Tsai, S.-C., & Huang, S.-K. (2021). REST API Fuzzing by Coverage Level Guided Blackbox Testing. *2021 IEEE 21st International Conference on Software Quality, Reliability and Security (QRS)*, 291–300. <https://doi.org/10.1109/QRS54544.2021.00040>
- Utomo, S., & Naldi, A. R. (2021). Perancangan Mading Digital Interaktif Di Fakultas Ilmu Komputer Dan Informatika Studi Kasus: Universitas Nurtanio Bandung. *Jurnal Teknologi Informasi Dan Komunikasi, 9*(2).