

# Implementation of Integrated System Related to Website-Based Employee Data Management

Muliaty, Ridwan Jamal, Adlin, Abd. Gunaldi Muin, Haeruddin



**Abstract:** The purpose of this study is to implement the restful method of the subsystem into a website-based integrated system for managing employee data and to update the employee data management system in an integrated manner. Data collection methods used are: observation, interviews, and library studies. The method used is the Rest method, better known as RESTful, in principle, a request for data to a RESTful web service is actually a reference or basic request in the delivery of resources through the media website. The results of the study prove that the resource itself is interpreted as anything that can be stored on internal digital storage data and displayed as an array of bits in the form of a softcopy of data or a blueprint of data, where the goal is to create a system that has good performance, is fast and easy to use. developed (scale) especially in data exchange and communication. The conclusion of this study is that the results of the implementation of an integrated system of data on periodic salary increases, promotions and employee leave are the solution to the problems that exist at the PSDKU State Polytechnic of Creative Media Makassar.

**Keywords:** Integrated system, Employee data, Web, RESTful

## I. INTRODUCTION

The concept of system integration is a concept where systems can be related to each other in various ways by adjusting to needs.[1] In this case, the integration of the system can collect several different systems to be combined or synchronized to form a single unit.[2] At the Makassar PSDKU Creative Media Polytechnic where the current conditions require a continuous employee data management system for performance achievement in the employee data management process.[3]-[4] Looking at the supporting services at the research location, they still use a system whose process flow is still separate so that if a direct data is needed, a matching process between existing data is needed, in each of the existing systems. Where data on periodic salary increases, promotions, and employee leave data are still fragmentary, so to see the relationship between one data and the history that has been stored in the employee data

management section, it takes quite a long time so it is considered necessary to make changes to the governance system integrated into the personnel department.[5]-[7] For this reason, it is necessary to develop the three subsystems to become a data center that will accommodate all existing data, so that the relationship between data can be clarified and prove that the development of an integrated system is a solution to existing problems.[8]-[11] The method used in this research is the method used in this study is the Rest method or in RESTful terms, in concept data requests for RESTful web services are actually a goal or basic request in delivering resources through the media website.[14]-[18] Where the principle is to make a system that has an attractive appearance, is flexible and easy to develop (scale), especially in data exchange and communication.[12]-[13]

## II. RESEARCH METHOD

### A. Data Collection Method

- Observation

Observation activities, namely making observations in the staffing section of the Makassar PSDKU Creative Media State Polytechnic by collecting data, information, and studying existing records and documents. The results obtained from observations are to know the working system that runs on employee data management, so that researchers can report activities directly on what has been seen and learned and can be stated in the writing of this journal.

- Interview

Interview with the Head of the Makassar PSDKU Management Unit and an interview with the personnel coordinator.

- Literature Stu

In this method, data collection is done by studying books, journals and supporting research results, including writing literature and on matters that support the creation of an integrated system program. Also learn from other data sources such as from the internet

### B. Test Method

The method used in this research is to do black box testing of the functionality or usability of an application. This test is carried out by fully focusing on assessing the needs and specifications of the system to be tested, by reviewing the system through the input and output processes without looking at the internal conditions of the program. [19]-[21]

## III. RESULT AND DISCUSSION

### A. Solution Design

- Admin Login Sequence Diagram

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\* Correspondence Author(s)

Muliaty\*, Politeknik Negeri Media Kreatif, Makassar, Indonesia. Email: [muliaty2675@gmail.com](mailto:muliaty2675@gmail.com)

Ridwan Jamal, Politeknik Negeri Media Kreatif, Makassar, Indonesia. Email: [jamal\\_ridwan64@yahoo.com](mailto:jamal_ridwan64@yahoo.com)

Adlin, Politeknik Negeri Media Kreatif, Makassar, Indonesia. Email: [andiadlin@polimedia.ac.id](mailto:andiadlin@polimedia.ac.id)

Abd. Gunaldi Muin, Politeknik Negeri Media Kreatif, Makassar, Indonesia. Email: [gunaldi\\_abdul@yahoo.com](mailto:gunaldi_abdul@yahoo.com)

Haeruddin, Politeknik Negeri Media Kreatif, Makassar, Indonesia. Email: [hacchink@gmail.com](mailto:hacchink@gmail.com)

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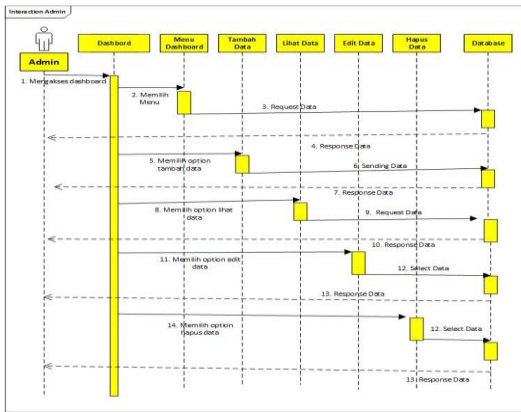


Figure I. Admin Login

Explains how, the admin process at login is where the process is. Admin will enter username and password. After that the authentication process will take place, if the data entered by the admin is in the database, a notification that the admin has successfully logged in will appear and the admin dashboard menu will appear for further data processing.

- Admin Sequence Diagram

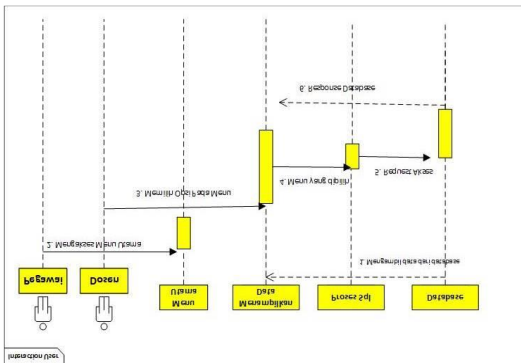


Figure II. Admin

Explains how the admin process in managing existing data using the website system, starting from the process of opening the dashboard menu then entering data, viewing data, editing data and deleting data needed, all of these processes will be directly stored and selected on the website's final storage.

- User Sequence Diagram

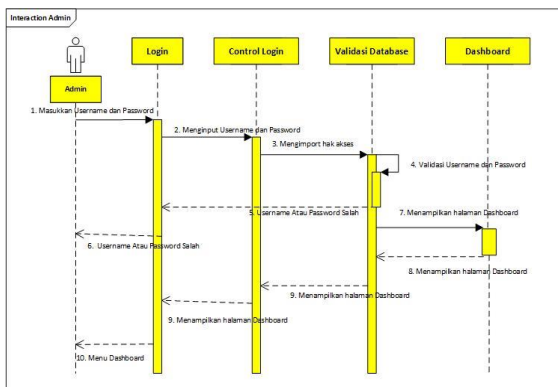


Figure III. User

Explains how users, employees, or lecturers when using the website, when the user opens the website, the initial display that will appear is the main menu, after that the user will be directed to choose what menu options are needed, the next

process the sql query will work to import data directly on the storage of each data so that the user can immediately see the details of the required data.

- System Design

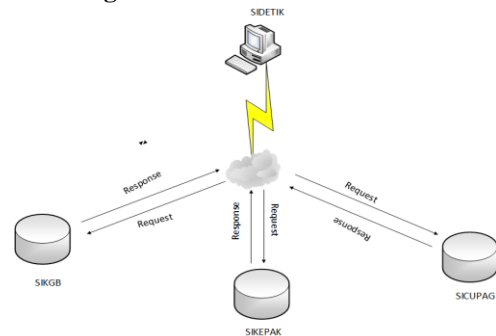


Figure. IV System Design

## B. System Test

From the results of system testing carried out using the black box method which can test the functionality on web pages that have been integrated into one system with the suitability of the final results of the web.

- Admin Login Page Test

Table- I. Admin Login

Test Faktor	Hasil
Memilih opsi detail pada sistem	✓
Output	
KET	✓ = Berhasil X = Tidak Berhasil

The table above shows the admin login page, where the admin needs to enter the username and password first and click the login button, if the account entered is correct, the dashboard will appear.

- User Page Test



Table II. User Page Test

Test Faktor	Hasil
Memilih opsi detail pada sistem	✓
Output	
KET	✓ = Berhasil X = Tidak Berhasil

In the next table displays the test on the user page where the page has options on the user menu, namely: KGB, KEPAK, CUPAG and DETAILS if the DETAIL menu is selected, a display of employee / lecturer details will appear starting from periodic salary increases, promotions, employee leave.

- Dashboard Display Test



**Table III. Dashboard Page**

Tes Faktor	Hasil
Memilih tombol melihat data	✓
 <p>↓ Output</p> 	
KET	✓ = Berhasil X = Tidak Berhasil

Based on the table above on the dashboard display, a button to view data will appear and add data if you click on the view data button, a display like the table above will appear in the form of a view containing buttons for viewing KGB data, see KEPAK data, view CUPAG data.

- Testing the Save Periodic Data function



**Table IV. KGB Testing the Save Periodic Data**

Tes Faktor	Hasil
Memilih tombol simpan data kenaikan gaji berkala pada sistem	✓
 <p>↓ Output</p> 	
KET	✓ = Berhasil X = Tidak Berhasil

In the table above, if the admin has finished entering data, it will select the save data button. If successful, a notification will appear that the data has been successfully stored in the database.

- Testing the function of Cancel Data Wear Rank



**Table V. KEPAK Data Cancel page**

Tes Faktor	Hasil
Memilih tombol batal data pada sistem	✓
 <p>↓ Output</p> 	
KET	✓ = Berhasil X = Tidak Berhasil

In the table above, if the admin wants to cancel data input, he will select the cancel data button, if successful, he will return to the dashboard display on the add data menu.

- Test the function Editing Data Wear Rank



**Table VI. KEPAK Data Cancel Page**

Tes Faktor	Hasil
Memilih tombol edit data kenaikan pangkat pada sistem	✓
 <p>↓ Output</p> 	
KET	✓ = Berhasil X = Tidak Berhasil

In the table above, if the admin finishes changing the data, it will select the save data button, if successful, it will return to the data table view.

- Testing the File Download function on the User

**Table- VII. File Download Page on User**

Tes Faktor	Hasil
Memilih tombol download berkas pada user	✓
 <p>↓ Output</p> 	
KET	✓ = Berhasil X = Tidak Berhasil

In the table above, if the user is going to retrieve data, he can press the download button on the icon at the right end of the system. If successful, the downloaded file will appear at the bottom of the screen indicating the file has been downloaded.

**IV. CONCLUSION**

The results of testing and research related to the implementation of an integrated system of employee data management, namely promotions, periodic salary increases, and website-based employee leave, the authors conclude as follows:

1. It is necessary to develop the three website-based subsystems, namely promotions, periodic salary increases, and employee leave to become the data center that will accommodate all existing data, so that the relationship between data can be clarified and prove that the results of implementing an integrated website-based system are a solution to problems that arise. there is.

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2. Data integration is the most necessary thing to do so that it can become a support system related to data management, so that data integration of promotions, periodic salary increases, and web-based employee leave is integrated. will be clearer, easily accessible and systematic in the management process.
3. Implementation of integrated data management that can be used as input for Information System developers at the Makassar PSDKU Creative Media State Polytechnic, and a prototype website-based information system for data collection. personnel department.

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## AUTHORS PROFILE



**Muliaty** is a state lecturer from the Makassar-Indonesia Creative Media State Polytechnic university, my last education was S3 in the field of Public Administration at the Postgraduate College of Makassar State University (UNM). I was appointed as a State Civil Apparatus (ASN) since March 1985 and appointed as a lecturer in 2011 Various research and community service activities have been carried out by me from 2011 until now and several scientific works of research results that have been published in SCOPUS include: Effects of Organization and Culture on Employees Performance in (2017), Administration of Post-Reformation Decentralization Government Vol.8, Issue 3, Year 2019), History of Transmissible Diseases and Its Impact on Human Survival (Psychology and Education 2020), Indonesia's Flooding Issues (JISSR Vol.1, Issue 1, Year 2021), Analysis of the Influence of Leadership, Organization Culture and Control Systems on Organizational Performance at Hasanuddin University Hospital (proceedings – singapore, March 7-11, 2021) and Overcoming Poverty by Increasing Local Own Revenue and General Allocation Funds Through Economic Growth in Central Mamuju Regency (Proceedings – Brazil, 5-8, 2021). Email: [muliaty2675@gmail.com](mailto:muliaty2675@gmail.com)



**Ridwan Jamal**, Place/Date of Birth: Ujung Pandang, September 7, 1964, Gender: Male, Religion: Islam, Education: S1 Management at STIA YAPPI Makassar, S2 Management at the Indonesian Muslim University, Email: [jamal\\_ridwan64@yahoo.com](mailto:jamal_ridwan64@yahoo.com), Position: Lecturer with the Rank of Lector at the Makassar Creative Media State Polytechnic Majoring in Graphic Design.



**Adlin**, Place/Date of Birth: Watampone, November 15, 1962, Gender: Male, Religion: Islam, Education: S1 Management at STIM LPI Makassar, S2 Management at UIT, Email: [andiadlin@polimedia.ac.id](mailto:andiadlin@polimedia.ac.id), Position: Lecturer at the rank of Lector at the Makassar Creative Media State Polytechnic, Department of Graphic Engineering.



**Abd. Gunaldi Muin**, Born in Padang, January 14, 1984, Muslim, resides on Jalan. Sunu Lr. 1B No. 19, Makassar, Email [gunaldi\\_abdul@yahoo.com](mailto:gunaldi_abdul@yahoo.com). Education 2002-2006 D3 Mechanical Engineering Hasanuddin University, 2006-2009 D3 Visual Communication Design Yogyakarta Art Polytechnic, 2009-2011 D4 Visual Communication Design Institute of Technology Bandung, 2012-2015 S2 Information Systems Management College of Management Science IMMI Jakarta, working as an Educational Personnel of the Skilled Education Laboratory Institution at the State Polytechnic of Creative Media, Department of Graphic Engineering in 2014 until now.



**Haeruddin**, Place of Birth: Sungguminasa, October 17, 1979, Gender: Male, Religion: Islam, Address: Jl. Swadaya No. 129, Kel. Tompobalang, Kec. Somba Opu, Kab. Gowa, Email: [haccink@gmail.com](mailto:haccink@gmail.com). Education / Higher Education: S1 Government Science at Panca Sakti University Makassar, S2 Communication Science at Hasanuddin University, JABATAN: The First Expert Education Laboratory Institution at the Makassar Creative Polymedia, 2018 – present.