

# Academic Information Systems Student Study Report Based HTML 5

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**Abstract** - In the present, study attempted to make academic information system by using HTML 5. Advantages of HTML 5 as compared to the previous version of HTML is the use of the screen can adjust to gadget or electronic equipment in use due to lack of facilities canvas in the HTML 5. In this study, Information Systems academic Study Reports made into 2 main sections. First, to see the results of a study in the semester that just runs (KHS) and the second is to look at the overall results of the study (Transcript). The data used in this study, samples were taken only a few students from one of the departments in the Unika.

**Keywords** - Canvas, Study Results, HTML 5, Academic Information Systems

## I. INTRODUCTION

Academic Information Systems, especially to see the results of both studies KHS or transcripts that already existed in Unika Soegijapranata still using HTML 4. In this study used the HTML 5 which is an extension of HTML 4 that supports the system mobile (Android based gadgets).

In this study of academic information system designed to look at the transcript or by using the HTML 5. KHS this study will be applied to student academic information system Unika Soegijapranata Semarang.

The purpose of this research is to make academic information systems students study reports both KHS and transcripts using HTML 5.

## II. LITERATURE

### A. Academic Information Systems

System Information by Leitch and Davis [1] is a system within an organization that brings transaction processing needs, support operations, managerial with outside parties who require such reports.

Academic Information System is an information system that includes an academic college. Academic information system in which there is a lot of information, one of which is information about the study results. To facilitate the student or students to see the results of studies that have been achieved. Nowadays, communication equipment (gadget) owned by almost all students, with the facilities provided by the college, they are expected to be able to access their values wherever they are by using gadget that students have, without having to come to campus.

Academic information system that will be created in this research is the study reports. Students were divided into 2 reports the results of a study of students in the semester that just passed (KHS) and the second is the cumulative study reports (transcripts).

### B. HTML 5

HTML (HyperText Markup Language) 5 is a markup language for structuring and displaying the contents of the World Wide Web, a core technology of the Internet [2]. HTML 5 is the fifth revision of the HTML.

In HTML 5, there are new features (elements) that are not contained in the previous HTML series. In HTML 5, it supports a wide variety of web browsers

such as Safari, Chrome, Mozilla Firefox, Opera, Internet Explorer, and etc.

One of the advantages of HTML 5 is Canvas facility compared with the previous HTML. With the canvas, the appearance of the HTML 5 does not change even if uses of the screen size for different types of gadget. So, the zoom will look proportionate to the screen, unlike the previous type that sometimes display HTML in gadget causes truncated and can not be accessed or read.

### III. RESEARCH METHODOLOGY

This study is divided into 5 stages as follows:

#### *Stage 1 Study of Literature*

In the study, phase of this literature is literature searching through books or the internet regarding academic information system as well as on HTML 5.

#### *Stage 2 Academic Information System Design Study Report*

The design of academic information systems students study report based on data owned by BMSI, from the raw data that contains information such as name, nim, subjects, and grades. The raw data is later processed into 2 of the first to see the results of a new study in semester runs (KHS) and the second saw summary entire value has been taken during the lecture to the new semester runs (transcript).

#### *Stage 3 Preparation Program Academic Information System Study Report*

Database processing used in the manufacture of this program is PHP, while the main program is using HTML 5 and also using jquery.

#### *Stage 4 Testing and Evaluation*

At this stage, the tests on some of the data that is used as a sample. At this stage, because the data provided by BMSI just limited to students of electrical courses, the test is carried out on existing data only.

#### *Stage 5 Preparation of Reports and Publications*

Broadly speaking measures the overall methodology of this research can be illustrated in the flow chart Fig 3.

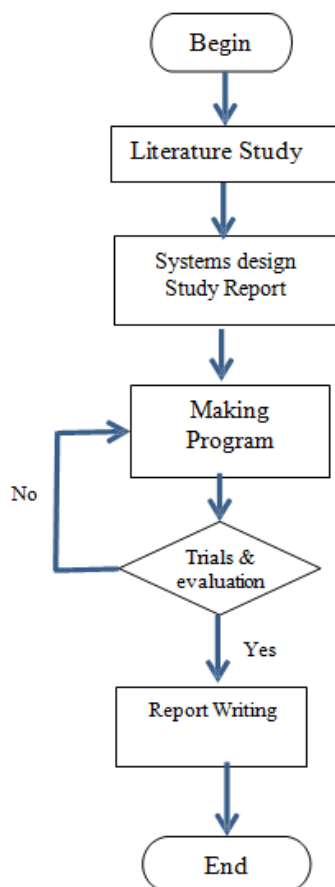


Fig 1. Research Methodology Steps

### IV. RESEARCH DESIGN AND RESULTS

Academic information system design study reports on this research there are 2 of KHS (Card Study Results) and transcripts. KHS is used to see the values taken in the semester that just passed and to see IPS (Semester GPA). As for the transcripts of all the courses that have been taken and also look at GPA.

#### *A. Design of Main Display*

The main view of the program begins with the login, the login lack of facilities canvas this means that not everyone can access this system. So that only certain people who have access can see these values as a student, faculty or administrative staff who have access

to this system. Login here for security are also given the facility password.

Program to search this login are:

```
require_once("config.php");
$nimc = $_POST['nimc'];
$result = mysql_query ("select nim
from tabelnilai where nim=" . $nimc. """) or
die ({ "success": "false" });
$totaldata =
mysql_num_rows($result);
if ($totaldata > 0 ) {
    $hasil = array(
        "success" => true,
        "msg" => "simpan"
    );
    echo (json_encode($hasil));
}
else {
    $hasil = array(
        "success" => false,
        "msg" => "error"
    );
    echo (json_encode($hasil));
}
```

Display of this log can be seen in Fig 2.



Fig 2. Login Display

Login NIM student is used, because it is not probably the same NIM between students with each other. NIM filled with the data nim that already exists, for example 10.50.0015, the results can be seen in Fig 3:



Fig 3. Example of Inserting NIM at Login

After a successful login then, the next step is to display the main menu. In the main menu there are two options, namely:

- Transcript
- KHS (Card Study Results)

In the first option contains student academic data (value) ever obtained up to half of the students recently completed pass. While the second option (KHS), contains information on the value of the semester that just passed by the student.

Display of this menu can be seen in Fig 4.



Fig 4. Main Menu Option

### B. Designing Display Card Study Results

In the main view, select menu if at KHS (Card Study Results), the display will appear as in Fig 5. KHS display program for this is:

```
require_once("config.php");
$nim1 = $_GET["nim1"];
$thnajar1 = $_GET["thnajar1"];
$periode1 = $_GET["periode1"];
if ($nim1=="") {
    $result = mysql_query ("SELECT
tabelnilai.nim,tabelnilai.kdmk_jur,tabelnilai.nm_mkul
iah,tabelnilai.nilai,tabelnilai.sks,tabelnilai.thnajar,tabe
```

```

Inilai.kd_msuji FROM tabelnilai where
tabelnilai.nim=" 'x2'. "" order by
tabelnilai.nim,tabelnilai.kdmk_jur") or die
(mysql_error());
    $totaldata = mysql_num_rows($result);
    } else {
        $result = mysql_query ("SELECT
tabelnilai.nim,tabelnilai.kdmk_jur,tabelnilai.nm_mkul
iah,tabelnilai.nilai,tabelnilai.sks,tabelnilai.thnajar,tabe
lnilai.kd_msuji FROM tabelnilai where
tabelnilai.nim=" ".$nim1. "" and tabelnilai.thnajar="
.substr($thnajar1,0,4). "" and tabelnilai.kd_msuji="
.$periode1. "" order by
tabelnilai.nim,tabelnilai.kdmk_jur") or die
(mysql_error());
        $totaldata = mysql_num_rows($result);
        if ($totaldata == 0 ) {
            $result = mysql_query ("SELECT
tabelnilai.nim,tabelnilai.kdmk_jur,tabelnilai.nm_mkul
iah,tabelnilai.nilai,tabelnilai.sks,tabelnilai.thnajar,tabe
lnilai.kd_msuji FROM tabelnilai where
tabelnilai.nim=" 'x2'. "" order by
tabelnilai.nim,tabelnilai.kdmk_jur") or die
(mysql_error());
        };
    }
    if ($totaldata > 0 ) {
        while ($row=mysql_fetch_array($result))
        {
            $data5[] = array(
                "nim"           => $row[0],
                "kdmk_jur"      => $row[1],
                "nm_mkuliah"    => $row[2],
                "nilai"         => $row[3],
                "sks"           => $row[4],
                "thnajar"       => $row[5],
                "kd_msuji"      => $row[6]
            );
            $data5++;
        }
    } else {

        $data5[] = array(
            "nim"           => "",
            "kdmk_jur"      => "",
            "nm_mkuliah"    => "",
            "nilai"         => "",
            "sks"           => "",
            "thnajar"       => "",
            "kd_msuji"      => ""
        );
    }
    echo json_encode($data5);
    ?
    >

```



Fig 5. Menu Display for KHS

In this view, there are fields that must be filled in the NIM, for the later name can be found in the source table using a PHP program, as well as the IP is also counting the semester is also done in PHP:

```

require_once("config.php");
$nim1 = "";
$nim1 = $_GET["nim1"];
$ipk1 = 0;$ipk2 = 0;
    $ipk3 = 0;$ipk4 = "";
    // hitung ip
    $result = mysql_query ("SELECT
tabelnilai.nim,tabelnilai.kdmk_jur,tabelnilai.nm_mkul
iah,tabelnilai.nilai,tabelnilai.sks,tabelnilai.thnajar,tabe
lnilai.kd_msuji FROM tabelnilai
where tabelnilai.nim=" ".$nim1. "" order by
tabelnilai.nim,tabelnilai.kdmk_jur") or die
(mysql_error());
    $totaldata = mysql_num_rows($result);
    if ($totaldata > 0 ) {
        while ($row=mysql_fetch_array($result))
        {
            $ipk1 = $ipk1 + $row[4];
            if (trim($row[3]) == "A") {
                $ipk2 = $ipk2 + (4*$row[4]);
            } else if (trim($row[3]) == "AB") {
                $ipk2 = $ipk2 + (3.5*$row[4]);
            } else if (trim($row[3]) == "B") {
                $ipk2 = $ipk2 + (3*$row[4]);
            } else if (trim($row[3]) == "BC") {
                $ipk2 = $ipk2 + (2.5*$row[4]);
            } else if (trim($row[3]) == "C") {
                $ipk2 = $ipk2 + (2*$row[4]);
            } else if (trim($row[3]) == "CD") {
                $ipk2 = $ipk2 + (1.5*$row[4]);
            } else if (trim($row[3]) == "D") {
                $ipk2 = $ipk2 + (1*$row[4]);
            } else if (trim($row[3]) == "E") {
                $ipk2 = $ipk2 + (0*$row[4]);
            }
        }
    }
    $ipk3 = $ipk2/$ipk1;
    $ipk4 = sprintf("%.2F", $ipk3);
<?php

```

```

    }
    $result = mysql_query ("SELECT
krs.namamhs,ipk.ipk from krs LEFT JOIN ipk ON
krs.nim=ipk.nim where krs.nim='".$nim1."'") or
die (mysql_error ());

$totaldata = mysql_num_rows($result);
$row       = mysql_fetch_array($result);
if ($totaldata > 0) {
    $hasil = array(
        "success"    => TRUE,
        "data6"      => array (
            "namamhsb" => $row[0],
            //"namamhsb"=> $ipk4,
            "ipk1b"   => $ipk4
        )
    );
} else {
    $hasil = array(
        "success"    => TRUE,
        "data6"      => array (
            "namamhsb" => "",
            "ipk1b"   => ""
        )
    );
}
echo (json_encode($hasil));
?>

```

In Fig 5, if the NIM is filled with 10.50.0015, and selected school year as well as the period selected G2 201 202 013 (even), then clicked search, it is also the name of an IP automatically next semester will be filled, as in the view Fig 6.



**Fig 6.** Results for Program Menu NIM 10.50.0015 at KHS

If you want to return to the search results of a study KHS for other students can be clicked again.

### C. Designing Menu Display Transcript

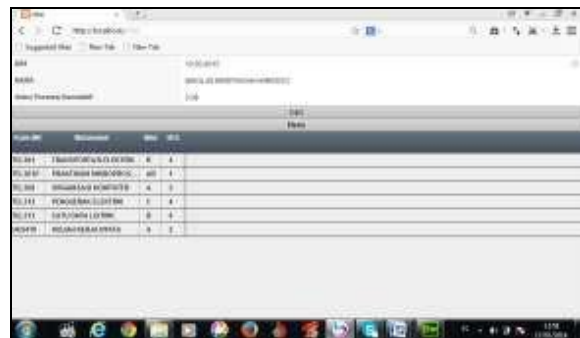
Display menu transcripts can be seen in Fig 7.



**Fig 7.** Display the Menu Transcript

On the menu this transcript, which is required NIM, whereas for the name of the source can be found in the table, while the GPA can be calculated.

If we fill the NIM 10.50.0015 as an example to look for GPA, then the result can be seen in Fig 8.



**Fig 8.** Display Results in the Programs Menu Transcript

Seen in Fig 8 nim information, names and GPA. If we compare Fig 7 and Fig 8, GPA and IP showed that half of the students are the same, this is because the data sample used is the data sample student of electro only the second semester 2012-2013.

### V. CONCLUSIONS

This research has made an academic information systems students study reports using HTML 5. In the production of academic information system, there are two main menus

of the first to see the results of a new study that traversed half (KHS) and the second to see the value of the results of the study during college up to half of the last pass (transcript). Testing in this study only on the data provided to us that the data electrical engineering student of second semester 2012-2013. Having tested the system based on Android OS can also run well.

## REFERENCES

**(Arranged in the order of citation in the same fashion as the case of Footnotes.)**

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