

## BAB IV

### PEMBAHASAN

#### 4.1 Hasil Pengujian

Hasil pengujian akan membahas *interface* dari aplikasi Implementasi *Dynamic Form*

Pada aplikasi *Sales Activity Tracking*

##### 4.1.1 Pengujian Menu Form Question Setting

Menu *Form Question Setting* adalah menu yang digunakan oleh admin untuk menambahkan setting pertanyaan atau detail form yang nantinya akan digunakan oleh teknisi saat melakukan aktivitas.

Form Question Name	Company Name	Service Type	Status	Action
Form Burger King F&B	Burger King	Food and Beverage	Inactive	Show Edit
Pizza Hut Kokas	Pizza Hut	F&B	Active	Show Edit Deactive
Pizza Hut CC	Pizza Hut	Food and Beverage	Active	Show Edit Deactive
Form Kopi Kenangan F&B	kopi kenangan	Food and Beverage	Inactive	Show Edit
Form Kopi Kenangan Toiletries	kopi kenangan	Toiletries	Active	Show Edit Deactive

Gambar 4.1.1 Halaman paging menu Form Question Setting

```

public function index(Request $request)
{
    $formQ = RefFormQuestion::has('serviceType')->has('refCoy');
    $serviceType = RefServiceType::where('is_active', '=', '1')->get();
    $coys = RefCoy::all();

    if ($request->form_question_name) {
        $formQ->where('form_question_name', 'like', '%' . $request->form_question_name . '%');
    }
    if ($request->status) {
        $formQ->where('is_active', $request->status);
    }
    if ($request->service_type) {
        $formQ->where('ref_service_type_id', '=', $request->service_type);
    }
    if ($request->ref_coy_id) {
        $formQ->where('ref_coy_id', '=', $request->ref_coy_id);
    }

    return view('pages.form_question.index', [
        'formQ' => $formQ->orderBy('created_at', 'desc')->paginate(5),
        'serviceType' => $serviceType,
        'coy' => $coys
    ]);
}

```

#### Segmen Program 4.1.1 Segment Program *paging menu form setting*

Halaman awal untuk menu ini dapat dilihat pada gambar 4.1.1, pada halaman ini user bisa melakukan pencarian data *form question* berdasarkan dari nama form, nama *client*, *service type* dan status.

Ketika user menekan button “*Add Form Question*” maka user akan diarahkan ke-halaman *add form question* yang bisa dilihat pada gambar 4.1.2.

Gambar 4.1.2 Halaman add Form Question Setting

```

public function save_header(Request $request)
{
    $serviceType = RefServiceType::where('is_active', '=', '1')->get();
    $coys = RefCoy::all();
    $ref_form = RefFormQuestion::where('ref_service_type_id', $request->service_type)->where('ref_coy_id', $request->ref_coy_id)
->where('is_active', '1')->first();
    if($ref_form != null){
        return view('pages.form_question.add_header',[ 
            'serviceType' => $serviceType,
            'coy' => $coys,
            'ref_form_question_id' => 0,
            'errors' => "There's already data with same service type and activity type!",
            'service_type' =>$request->service_type,
            'ref_coy_id' =>$request->ref_coy_id,
            'is_active' =>$request->is_active,
            'form_name' =>$request->form_name,
        ]);
    }else{
        $ref_form_question = array();
        $ref_form_question['form_question_name'] = $request->form_name;
        $ref_form_question['is_active'] = $request->is_active;
        $ref_form_question['total_form_signer'] = '1';
        $ref_form_question['ref_service_type_id'] = $request->service_type;
        $ref_form_question['ref_coy_id'] = $request->ref_coy_id;
        $form_q = RefFormQuestion::create($ref_form_question);

        $formQ = RefFormQuestion::has('serviceType')->where('id', $form_q->id)->first();
        $coys = RefCoy::where('id', $request->ref_coy_id)->first();
    }
    return view('pages.form_question.add_detail',[ 
        'serviceType' => $serviceType,
        'form_q' => $formQ,
        'coy' => $coys,
        'errors' => ""
    ]);
}

```

Segmen Program 4.1.2 Segment Program *save form question header*

Ketika user telah mengisi inputan maka user menekan *button “Next”* dan user akan diarahkan ke-halaman *add form question detail* yang bisa dilihat pada gambar

4.1.3.

Gambar 4.1.3 Halaman add form question setting detail

```

public function save_detail(Request $request)
{
    $a = array();
    $a = $request->header_seq;
    $index_header = array_key_last($a);
    $ref_form = ReFormQuestion::where('id', $request->ref_form_question_id)->first();

    for ($x = 0; $x <= $index_header; $x++) {
        if(array_key_exists($x, $request->header_seq)){
            $form_h = array();
            $form_h['ref_form_question_id'] = $request->ref_form_question_id;
            $form_h['question_header'] = $request->header_desc[$x];
            $form_h['seq_no'] = $request->header_seq[$x];
            $form_h['is_active'] = '1';
            $form_h = ReFormQuestionH::create($form_h);

            $form_header = ReFormQuestionH::where('ref_form_question_id', $form_h->ref_form_question_id)->where('question_header', $form_h->question_header)
            ->where('seq_no', $form_h->seq_no)->where('is_active', $form_h->is_active)->first();

            $b = array();
            $b = $request->detail_question[$x];
            $index_detail = array_key_last($b);
            $seq_no = 1;
            for ($i = 0; $i <= $index_detail; $i++) {
                if(array_key_exists($i, $request->detail_question[$x])){
                    $form_d = array();
                    $form_d['ref_form_question_h_id'] = $form_header->id;
                    $form_d['seq_no'] = $seq_no;
                    $form_d['is_active'] = '1';
                    $form_d['question'] = $request->detail_question[$x][$i];
                    $form_detail = ReFormQuestionD::create($form_d);
                    $seq_no++;
                }
            }
        }
    }
    return redirect('form_question/')->with('message', $ref_form->form_question_name.' successfully added');
}

```

Segmen Program 4.1.3 Segment Program save form question detail

Setelah user menginputkan *detail form* dan menekan button “Submit” maka data akan tersimpan dan user akan dibawa menuju halaman paging kembali seperti

pada gambar 4.1.4.

The screenshot shows a web application interface for managing form questions. At the top, a green header bar displays the message "Form Burger King Toiletries successfully added". Below this, the main title "Form Question Data" is centered, with a "Add Form Question" button in the top right corner. The search form includes fields for "Form Question Name" (set to "Form Question Name"), "Company Name" (set to "All"), "Service Type" (set to "All"), and "Status" (set to "All"). A "Search" button is located at the bottom right of the search area. The main content area displays a table of form questions:

Form Question Name	Company Name	Service Type	Status	Action
Form Burger King Toiletries	Burger King	Toiletries	Active	Show Edit Deactive
Form Burger King F&B	Burger King	Food and Beverage	Inactive	Show Edit
Pizza Hut Kokas	Pizza Hut	F&B	Active	Show Edit Deactive

Gambar 4.1.4 Halaman paging setelah menginputkan form question

Ketika *user* ingin melihat data *form question* yang sudah ditambahkan, *user* dapat menekan *button* “Show” dan *user* akan ditampilkan data dari *form question* yang dipilih seperti pada gambar 4.1.5.

The screenshot shows the details of the first form question listed in the previous screenshot. The title is "Show Form Question". The top section displays the form name "Form Burger King Toiletries", company name "Burger King", service type "Toiletries", and status "Active". The main content area is divided into two sections, each labeled with a number (1 and 2) and a "Detail" heading. Section 1 contains the entry "Lantai 1" under "Toilet lantai 1". Section 2 contains the entry "Lantai 2" under "Toilet Lantai 2".

Gambar 4.1.5 Halaman show form question

```

public function show(Request $request, $id)
{
    $formQ = RefFormQuestion::has('serviceType')->where('id', $id)->first();
    $coys = RefCoy::where('id', $formQ->ref_coy_id)->first();
    $formQ['ref_form_question_h'] = RefFormQuestionH::where('ref_form_question_id', $id)->where('is_active', '1')->orderBy('seq_no', 'asc')->get();

    for ($x = 0; $x < count($formQ['ref_form_question_h']); $x++) {
        $formQ['ref_form_question_h'][$x]['ref_form_question_d'] = RefFormQuestionD::where('ref_form_question_h_id', $formQ['ref_form_question_h'][$x]['id'])
            ->where('is_active', '1')->orderBy('seq_no', 'asc')->get();
    }
    return view('pages.form_question.show', [
        'form_q' => $formQ,
        'coys' => $coys
    ]);
}

```

#### Segmen Program 4.1.4 Segment Program *show Form Question*

Jika user ingin merubah data *form question* maka user perlu menekan *button* “Edit”, dan akan masuk pada halaman *form question “header”* seperti gambar

##### 4.1.6.

Gambar 4.1.6 Halaman *edit form question “header”*

```

public function edit_detail(Request $request)
{
    $serviceType = RefServiceType::where('is_active', '=', '1')->get();
    $coys = RefCoy::all();
    $ref_form = RefFormQuestion::where('ref_service_type_id', $request->service_type)->where('ref_coy_id', $request->ref_coy_id)
        ->where('is_active', '1')->where('id', '!=', $request->ref_form_question_id)->first();
    if ($ref_form != null && $request->is_active == "1") {
        return view('pages.form_question.edit_header', [
            'serviceType' => $serviceType,
            'coy' => $coys,
            'form_q' => $ref_form,
            'errors' => "There's already data with same service type and Company!"
        ]);
    } else {
        $ref_form = array();
        $ref_form['form_question_name'] = $request->form_name;
        $ref_form['is_active'] = $request->is_active;
        $ref_form['ref_service_type_id'] = $request->service_type;
        $ref_form['ref_coy_id'] = $request->ref_coy_id;
        RefFormQuestion::where('id', $request->ref_form_question_id)->update($ref_form);

        $formQ = RefFormQuestion::has('serviceType')->where('id', $request->ref_form_question_id)->first();
        $formQ['ref_form_question_h'] = RefFormQuestionH::where('ref_form_question_id', $request->ref_form_question_id)
            ->where('is_active', '1')->orderBy('seq_no', 'asc')->get();

        for ($x = 0; $x < count($formQ['ref_form_question_h']); $x++) {
            $formQ['ref_form_question_h'][$x]['ref_form_question_d'] = RefFormQuestionD::where('ref_form_question_h_id', $formQ['ref_form_question_h'][$x]['id'])
                ->where('is_active', '1')->orderBy('seq_no', 'asc')->get();
        }
        return view('pages.form_question.edit_detail', [
            'serviceType' => $serviceType,
            'coy' => $coys,
            'form_q' => $formQ,
            'errors' => ""
        ]);
    }
}

```

#### Segmen Program 4.1.4 Segment Program *edit Form Question header*

Setelah user merubah bagian header dari *form question*, user menekan button “Next” dan akan diarahkan ke halaman *edit form question “detail”* seperti gambar 4.1.7.

The screenshot shows a web-based application titled "Edit Detail Form". At the top, there are several metadata fields: "Form Name : Form Burger King Toiletries 2", "Service Type : Toiletries", "Company Name : Burger King", "Number of signatures : 1", and "Status : Active". A "Submit" button is located in the top right corner. Below this, the main content area is divided into two horizontal sections, each representing a floor level:

- Section 1 (Lantai 1):** Contains a "Detail" section with the text "Toilet lantai 1" and a "+" button to its right. It also includes a small icon of a pen and the number "1".
- Section 2 (Lantai 2):** Contains a "Detail" section with the text "Toilet Lantai 2" and a "+" button to its right. It also includes a small icon of a pen and the number "2".

At the bottom of the page, there is a blue rectangular button labeled "+ Tambah" (Add) with a plus sign icon.

Gambar 4.1.7 Halaman *edit form question “detail”*

```

public function update_detail(Request $request)
{
    $a = array();
    $a = $request->header_seq;
    $index_header = array_key_last($a);
    $ref_form = RefFormQuestionH::where('id', $request->ref_form_question_id)->first();
    for ($x = 0; $x <= $index_header; $x++) {
        if(array_key_exists($x, $request->header_seq)){
            $form_header = array();
            if(isset($request->form_h_id[$x]) && $request->form_h_id[$x] != '0'){
                $form_h = array();
                $form_h['question_header'] = $request->header_desc[$x];
                $form_h['seq_no'] = $request->header_seq[$x];
                $form_h['is_active'] = '1';

                RefFormQuestionH::where('id', $request->form_h_id[$x])->update($form_h);
                $form_header = RefFormQuestionH::where('id', $request->form_h_id[$x])->first();
            }else{
                $form_h = array();
                $form_h['ref_form_question_id'] = $request->ref_form_question_id;
                $form_h['question_header'] = $request->header_desc[$x];
                $form_h['seq_no'] = $request->header_seq[$x];
                $form_h['is_active'] = '1';

                $form_h = RefFormQuestionH::create($form_h);
                $form_header = RefFormQuestionH::where('ref_form_question_id', $form_h->ref_form_question_id)->where('question_header', $form_h->question_header)
                ->where('seq_no', $form_h->seq_no)->where('is_active', $form_h->is_active)->first();
            }
        }

        $form_d_deactive = RefFormQuestionD::where('ref_form_question_h_id', $form_header->id)->whereNotIn('id', $request->form_d_id[$x])->get();
        for ($a = 0; $a < count($form_d_deactive); $a++) {
            $form_d = array();
            $form_d['is_active'] = '0';
            RefFormQuestionD::where('id', $form_d_deactive[$a]->id)->update($form_d);
        }

        $b = array();
        $b = $request->detail_question[$x];
        $index_detail = array_key_last($b);
        $seq_no = 1;
        for ($i = 0; $i <= $index_detail; $i++) {
            if(array_key_exists($i, $request->detail_question[$x])){
                if(isset($request->form_d_id[$x][$i]) && $request->form_d_id[$x][$i] != '0'){
                    $form_d = array();
                    $form_d['seq_no'] = $seq_no;
                    $form_d['question'] = $request->detail_question[$x][$i];
                    RefFormQuestionD::where('id', $request->form_d_id[$x][$i])->update($form_d);
                }else{
                    $form_d = array();
                    $form_d['ref_form_question_h_id'] = $form_header->id;
                    $form_d['seq_no'] = $seq_no;
                    $form_d['is_active'] = '1';
                    $form_d['question'] = $request->detail_question[$x][$i];
                    $form_detail = RefFormQuestionD::create($form_d);
                }
            }
            $seq_no++;
        }
    }
}

```

#### Segmen Program 4.1.5 Segment Program *edit Form Question detail*

Pada halaman tersebut *user* dapat menambahkan detail pertanyaan atau detail *form*. Setelah itu *user* menekan *button* “*Submit*” untuk menyimpan perubahan data tersebut dan akan diarahkan ke halaman paging dengan pesan bahwa data berhasil tersimpan seperti pada gambar 4.1.8.

Form Burger King Toiletries 2 successfully updated

Form Question Data				<a href="#">Add Form Question</a>																														
Form Question Name	Company Name	Service Type	Status																															
Form Question Name	All			<a href="#">Search</a>																														
Service Type	Status																																	
All	All																																	
<table border="1"> <thead> <tr> <th>Form Question Name</th> <th>Company Name</th> <th>Service Type</th> <th>Status</th> <th></th> </tr> </thead> <tbody> <tr> <td>Form Burger King Toiletries 2</td> <td>Burger King</td> <td>Toiletries</td> <td>Active</td> <td><a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a></td> </tr> <tr> <td>Form Burger King F&amp;B</td> <td>Burger King</td> <td>Food and Beverage</td> <td>Inactive</td> <td><a href="#">Show</a> <a href="#">Edit</a></td> </tr> <tr> <td>Pizza Hut Kokas</td> <td>Pizza Hut</td> <td>F&amp;B</td> <td>Active</td> <td><a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a></td> </tr> <tr> <td>Pizza Hut CC</td> <td>Pizza Hut</td> <td>Food and Beverage</td> <td>Active</td> <td><a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a></td> </tr> <tr> <td>Form Kopi Kenangan F&amp;B</td> <td>kopi kenangan</td> <td>Food and Beverage</td> <td>Inactive</td> <td><a href="#">Show</a> <a href="#">Edit</a></td> </tr> </tbody> </table>					Form Question Name	Company Name	Service Type	Status		Form Burger King Toiletries 2	Burger King	Toiletries	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>	Form Burger King F&B	Burger King	Food and Beverage	Inactive	<a href="#">Show</a> <a href="#">Edit</a>	Pizza Hut Kokas	Pizza Hut	F&B	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>	Pizza Hut CC	Pizza Hut	Food and Beverage	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>	Form Kopi Kenangan F&B	kopi kenangan	Food and Beverage	Inactive	<a href="#">Show</a> <a href="#">Edit</a>
Form Question Name	Company Name	Service Type	Status																															
Form Burger King Toiletries 2	Burger King	Toiletries	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>																														
Form Burger King F&B	Burger King	Food and Beverage	Inactive	<a href="#">Show</a> <a href="#">Edit</a>																														
Pizza Hut Kokas	Pizza Hut	F&B	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>																														
Pizza Hut CC	Pizza Hut	Food and Beverage	Active	<a href="#">Show</a> <a href="#">Edit</a> <a href="#">Deactive</a>																														
Form Kopi Kenangan F&B	kopi kenangan	Food and Beverage	Inactive	<a href="#">Show</a> <a href="#">Edit</a>																														

Gambar 4.1.8 Halaman *paging* dengan pesan sukses merubah data

Jika user ingin melakukan deaktivasi dari *form question* yang sudah ditambahkan maka *user* bisa menekan *button* “*Deactive*”, setelah user menekan *button* tersebut maka *status form question* akan menjadi “*Inactive*” dan akan diarahkan ke halaman *paging* dengan pesan bahwa data sukses untuk di-deaktivasi seperti gambar 4.1.9.

Form Burger King Toiletries 2 successfully deactivate

Form Question Data				<a href="#">Add Form Question</a>										
Form Question Name	Company Name	Service Type	Status											
Form Question Name	All			<a href="#">Search</a>										
Service Type	Status													
All	All													
<table border="1"> <thead> <tr> <th>Form Question Name</th> <th>Company Name</th> <th>Service Type</th> <th>Status</th> <th></th> </tr> </thead> <tbody> <tr> <td>Form Burger King Toiletries 2</td> <td>Burger King</td> <td>Toiletries</td> <td>Inactive</td> <td><a href="#">Show</a> <a href="#">Edit</a></td> </tr> </tbody> </table>					Form Question Name	Company Name	Service Type	Status		Form Burger King Toiletries 2	Burger King	Toiletries	Inactive	<a href="#">Show</a> <a href="#">Edit</a>
Form Question Name	Company Name	Service Type	Status											
Form Burger King Toiletries 2	Burger King	Toiletries	Inactive	<a href="#">Show</a> <a href="#">Edit</a>										

Gambar 4.1.9 Halaman *paging* dengan pesan sukses deaktivasi data

```

public function deactivate(Request $request, $id)
{
    $ref_form = RefFormQuestion::where('id', $id)->first();
    $ref_form['is_active'] = '0';

    $ref_form->save();

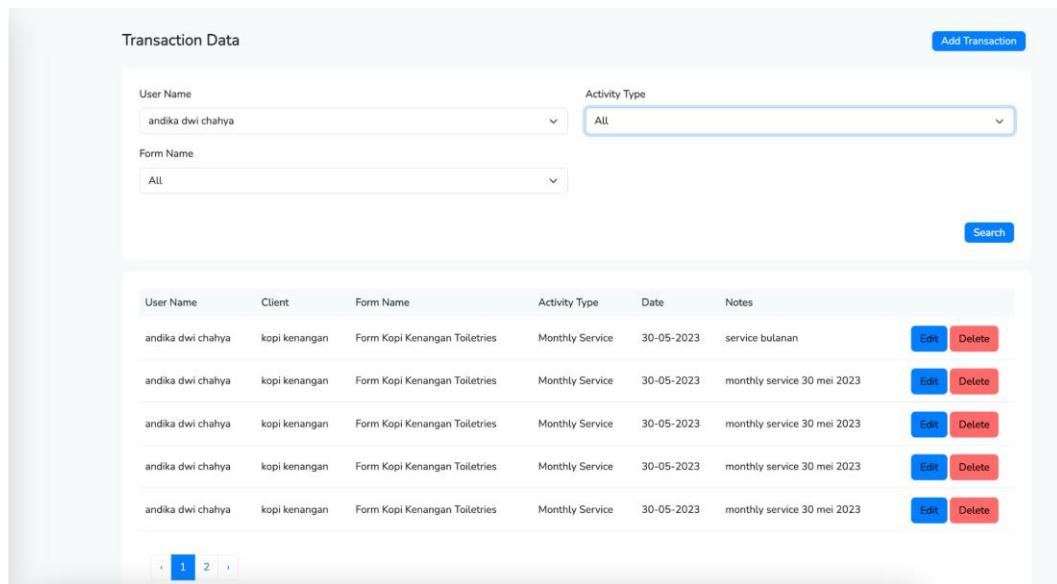
    return redirect('form_question/')->with('message', $ref_form->form_question_name.' successfully deactivate');
}

```

Segmen Program 4.1.6 Segment Program *deactive Form Question*

#### 4.1.2 Pengujian Menu Transaction

Menu Transaction adalah menu yang digunakan oleh teknisi untuk mencatat kondisi dari aset atau barang yang berada pada client saat melakukan kunjungan. Halaman awal untuk menu ini dapat dilihat pada gambar 4.2.1, pada halaman ini user bisa melakukan pencarian data transaksi berdasarkan dari nama form, nama user , activity type dan status.



The screenshot shows a web-based application interface titled "Transaction Data". At the top, there are two dropdown menus: "User Name" (set to "andika dwi chahya") and "Activity Type" (set to "All"). Below these are two more dropdown menus: "Form Name" (set to "All") and "Status" (set to "All"). To the right of these dropdowns is a blue "Search" button. The main area displays a table of transaction data with the following columns: User Name, Client, Form Name, Activity Type, Date, and Notes. Each row in the table contains five entries, each with a blue "Edit" button and a red "Delete" button. At the bottom of the table, there are navigation arrows for pagination, with the number "1" highlighted in blue.

User Name	Client	Form Name	Activity Type	Date	Notes	Edit	Delete
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	service bulanan	<span style="background-color: #007bff; color: white; padding: 2px 5px;">Edit</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px;">Delete</span>
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023	<span style="background-color: #007bff; color: white; padding: 2px 5px;">Edit</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px;">Delete</span>
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023	<span style="background-color: #007bff; color: white; padding: 2px 5px;">Edit</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px;">Delete</span>
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023	<span style="background-color: #007bff; color: white; padding: 2px 5px;">Edit</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px;">Delete</span>
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023	<span style="background-color: #007bff; color: white; padding: 2px 5px;">Edit</span>	<span style="background-color: #dc3545; color: white; padding: 2px 5px;">Delete</span>

Gambar 4.2.1 Halaman *paging menu transaction*

```

public function index(Request $request)
{
    $trx = TrxService::has('activityType')->has('user')->has('refFormQuestion');
    $serviceType = RefServiceType::where('is_active', '=', '1')->get();
    $activityType = RefActivityType::where('is_active', '=', '1')->get();
    $form_q = RefFormQuestion::has('refCoy')->where('is_active', '=', '1')->get();
    $user_login = Auth::user();
    if($user_login->level == '1'){
        $users = User::all();
        $coys = RefCoy::all();
    }else{
        $users = User::where('id', '=', $user_login->id)->get();
        $coys = RefCoy::where('area_id', '=', $user_login->area_id)->get();
        $coy_id= array();
        $form_id= array();
        for ($x = 0; $x < count($coys); $x++) {
            $coy_id[$x] = $coys[$x]->id;
        }
        $form = RefFormQuestion::has('refCoy')->where('is_active', '=', '1')->whereIn('ref_coy_id', $coy_id)->get();
        for ($x = 0; $x < count($form); $x++) {
            $form_id[$x] = $form[$x]->id;
        }
        $trx->where('ref_user_id', '=', $user_login->id);
    }

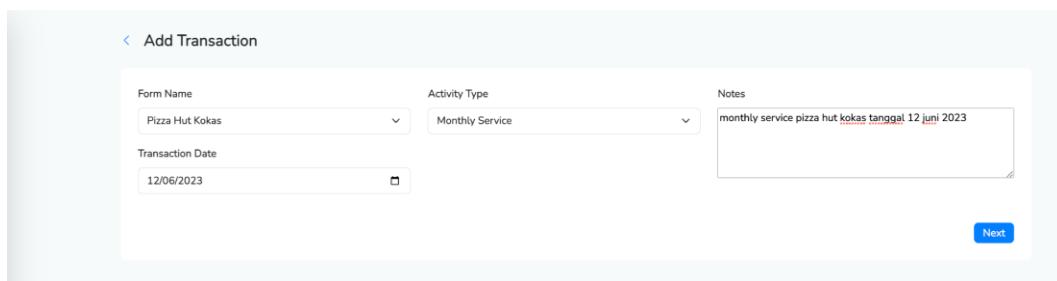
    if ($request->user_id) {
        $trx->where('ref_user_id', $request->user_id );
    }
    if ($request->form_id) {
        $trx->where('ref_form_question_id', $request->form_id);
    }
    if ($request->activity_type) {
        $trx->where('ref_activity_type_id', $request->activity_type);
    }

    return view('pages.trx.index', [
        'trx' => $trx->orderBy('created_at', 'desc')->paginate(5),
        'activityType' => $activityType,
        'user' => $users,
        'form_q' => $form_q
    ]);
}

```

#### Segmen Program 4.2.1 Segment Program *paging Transaction*

Ketika teknisi ingin menginputkan kunjungannya pada client maka teknisi menekan *button “Add Transaction”* dan teknisi akan diarahkan kepada halaman *add transaction “header”* seperti pada gambar 4.2.2.



Gambar 4.2.2 Halaman *add transaction “header”*

```

public function add_detail(Request $request)
{
    $activityType = RefActivityType::where('is_active', '=', '1')->get();
    $form_q = RefFormQuestion::has('refCoy')->where('is_active', '=', '1')->get();

    $trx = array();
    $trx['ref_user_id'] = Auth::user()->id;
    $trx['supervisor_id_in_charge'] = Auth::user()->supervisor_id;
    $trx['ref_form_question_id'] = $request->ref_form_question_id;
    $trx['ref_activity_type_id'] = $request->activity_type;
    $trx['service_dt'] = $request->service_dt;
    $trx['notes'] = $request->notes;
    $trxService = TrxService::create($trx);

    $trxS = TrxService::where('id', $trxService->id)->first();

    $form = RefFormQuestion::has('serviceType')->where('id', $trxS->ref_form_question_id)->first();
    $formH = RefFormQuestionH::where('ref_form_question_id', $trxS->ref_form_question_id)->where('is_active', '1')->orderBy('seq_no', 'asc')->get();
    $formD = array();
    for ($x = 0; $x < count($formH); $x++) {
        $formB[$x] = RefFormQuestionB::where('ref_form_question_h_id', $formH[$x]['id'])->where('is_active', '1')->orderBy('seq_no', 'asc')->get();
    }

    return view('pages.trx.add_detail', [
        'activityType' => $activityType,
        'trxS' => $trxS,
        'form' => $form,
        'formH' => $formH,
        'formB' => $formB,
        'errors' => '',
        'trx_id' => $trxS->id,
        'form_q' => $form_q
    ]);
}

```

#### Segmen Program 4.2.2 Segment Program *save transaction header*

Pada halaman ini teknisi mengisi *form name*, jenis aktivitas, tanggal dan catatan terkait dengan kunjungan yang dilakukan ke-*client*. Setelah menginputkan data tersebut teknisi menekan *button “Next”* untuk diarahkan ke-halaman *add transaction detail* seperti pada gambar 4.2.3.

The screenshot shows a form for adding transaction details. It contains three service items:

- sabun dishwasher**: Notes: melakukan refill stock. File upload: sabun dishwasher.jpeg.
- Tollet**: Notes: berfungsi dengan baik. File upload: pengering tangan.jpeg.
- sabun cuci tangan**: Notes: melakukan refill stock. File upload: sabun cuci tangan.jpg.

Below these sections is the "Add Signer" area, which includes fields for Signer Name (Bp. Benedictus Supriadi) and Signer Position (Manager cabang), and a "Draw Signature" field containing a handwritten signature.

Gambar 4.2.2 Halaman *add transaction “detail”*

```
public function save_detail(Request $request)
{
    for ($x = 0; $x < count($request->form_h_id); $x++) {
        $trx_h = array();
        $trx_h['trx_service_id'] = $request->trx_id;
        $trx_h['ref_form_question_h_id'] = $request->form_h_id[$x];
        $trx_header = TrxServiceH::create($trx_h);

        for ($i = 0; $i < count($request->form_d_id[$x]); $i++) {
            $trx_d = array();
            $trx_d['trx_service_h_id'] = $trx_header->id;
            $trx_d['ref_form_question_d_id'] = $request->form_d_id[$x][$i];
            $trx_d['answer'] = isset($request->answer[$x][$i]) && $request->answer[$x][$i] != "" ? $request->answer[$x][$i] : 'Tidak';
            $trx_d['notes'] = $request->notes[$x][$i];

            $image_path = $request->file('image')[$x][$i]->store('image', 'public');

            $name = $request->file('image')[$x][$i]->getClientOriginalName();
            $path = $request->image[$x][$i];
            $trx_d['image_path'] = $image_path;
            $trx_detail = TrxServiceD::create($trx_d);
        }
    }

    $trx_s = array();
    $trx_s['trx_service_id'] = $request->trx_id;
    $trx_s['signer_name'] = $request->signer_name;
    $trx_s['signer_position'] = $request->signer_position;
    $trx_s['seq_no'] = '1';
    $trx_s['sign_path'] = $request->signed;
    $trx_signer = TrxServiceSigner::create($trx_s);

    return redirect('trx/')->with('message', 'successfully inputed');
}
```

Segmen Program 4.2.3 Segment Program *save transaction detail*

Pada halaman ini teknisi melaporkan pekerjaan yang dilakukan pada *client*, data yang diinputkan berupa gambar dari *asset*, catatan terkait aset tersebut dan meminta tanda tangan dari penanggung jawab sebagai bukti bahwa teknisi telah melakukan tugas dengan sesuai. Setelah melakukan pengisian tersebut teknisi menekan button “*Submit*”, data akan tersimpan dan teknisi akan diarahkan ke halaman *paging* dengan pesan sukses seperti pada gambar 4.2.3.

The screenshot shows a web-based application interface for managing transactions. At the top, a green header bar displays the text "successfully inputed". Below this, the main title is "Transaction Data". On the right side of the title, there is a blue button labeled "Add Transaction". The form contains two dropdown menus: "User Name" (set to "andika dwi chahya") and "Activity Type" (set to "All"). Below these are two more dropdown menus: "Form Name" (set to "All") and "Date" (set to "All"). To the right of these dropdowns is a blue "Search" button. The main content area features a table with the following data:

User Name	Client	Form Name	Activity Type	Date	Notes
andika dwi chahya	Pizza Hut	Pizza Hut Kokas	Monthly Service	12-06-2023	monthly service pizza hut kokas tanggal 12 juni 2023

At the bottom right of the table are two buttons: a blue "Edit" button and a red "Delete" button.

Gambar 4.2.3 Halaman *paging* dengan pesan sukses

Jika teknisi ingin merubah data transaksi yang sudah ditambahkan, maka teknisi perlu menekan button “*Edit*” pada data transaksi yang akan dirubah, setelah user menekan button tersebut maka user akan diarahkan ke halaman *Edit Transaction “header”* seperti pada gambar 4.2.4.

The screenshot shows the "Edit Transaction" header page. At the top left, there is a back arrow and the text "Edit Transaction". The main form area contains three fields: "Form Name" (set to "Pizza Hut Kokas"), "Activity Type" (set to "Monthly Service"), and a large "Notes" text area containing the text "monthly service pizza hut kokas tanggal 12 juni 2023". Below the form is a blue "next" button.

Gambar 4.2.4 Halaman *edit transaction “header”*

```

public function update_header(Request $request)
{
    $activityType = RefActivityType::where('is_active', '=', '1')->get();
    $coys = RefCoy::all();
    $form_q = RefFormQuestion::has('refCoy')->where('is_active', '=', '1')->get();

    $trx = array();
    $trx['ref_user_id'] = Auth::user()->id;
    $trx['supervisor_id_in_charge'] = Auth::user()->supervisor_id;
    $trx['ref_form_question_id'] = $request->ref_form_question_id;
    $trx['ref_activity_type_id'] = $request->activity_type;
    $trx['service_dt'] = $request->service_dt;
    $trx['notes'] = $request->notes;
    TrxService::where('id', $request->trx_id)->update($trx);

    $trxS = TrxService::where('id', $request->trx_id)->first();

    $trxH = TrxServiceH::where('trx_service_id', $trxS->id)->has('refFormQuestionH')->get();
    for($a = 0; $a < count($trxH); $a++){
        $trxD[$a] = TrxServiceD::where('trx_service_h_id', $trxH[$a]->id)->has('refFormQuestionD')->get();
    }
    $trxSigner = TrxServiceSigner::where('trx_service_id', $trxS->id)->first();

    return view('pages.trx.edit_detail', [
        'trxH' => $trxH,
        'trxD' => $trxD,
        'form_q' => $form_q,
        'activityType' => $activityType,
        'trxS' => $trxS,
        'trxSigner' => $trxSigner,
        'errors' => ""
    ]);
}

```

### Segmen Program 4.2.3 Segment Program *edit transaction header*

Setelah user merubah data “*header*” tersebut, user menekan *button* “*Next*”

untuk menuju halaman *edit transaction detail* seperti pada gambar 4.2.5.

The screenshot shows a web-based application interface for editing transaction details. It displays three main sections:

- sabun dishwasher**: Includes a checked checkbox, a notes input field containing "melakukan refill stock", and an image of a blue bottle.
- Toilet**: Contains two items: "pengering tangan" (checked) with notes "berfungsi dengan baik" and an image of a white hand dryer; and "sabun cuci tangan" (checked) with notes "melakukan refill stock" and an image of a liquid soap bottle.
- Signer**: Shows the signer's name "Bp. Benedictus Supriadi", their position "Manager cabang", and a handwritten signature.

Gambar 4.2.5 Halaman *edit transaction “detail”*

```
public function update_detail(Request $request)
{
    for($a = 0; $a < count($request->trx_h_id); $a++){
        $trxH = TrxServiceH::where('id', $request->trx_h_id[$a])->first();
        for($i = 0; $i < count($request->trx_d_id[$a]); $i++){
            $trx_d = array();
            $trx_d['answer'] = isset($request->answer[$a][$i]) && $request->answer[$a][$i] != "" ? $request->answer[$a][$i] : 'Tidak';
            $trx_d['notes'] = $request->notes[$a][$i];
            TrxServiceD::where('id', $request->trx_d_id[$a][$i])->update($trx_d);
        }
    }
    return redirect('trx/')->with('message', 'successfully updated');
}
```

Segmen Program 4.2.4 Segment Program *edit transaction detail*

Setelah merubah data transaksi, user menekan button “Submit” dan user akan diarahkan ke halaman paging dengan pesan sukses seperti gambar 4.2.6.

successfully updated

User Name	Client	Form Name	Activity Type	Date	Notes
andika dwi chahya	Pizza Hut	Pizza Hut Kokas	Monthly Service	12-06-2023	monthly service pizza hut kokas tanggal 12 juni 2023

Gambar 4.2.6 Halaman *paging* dengan pesan sukses

Jika teknisi ingin menghapus data transaksinya, maka teknisi bisa menekan *button* “Delete”, setelah menekan *button* tersebut maka data transaksi akan terhapus dan akan memunculkan pesan sukses menghapus data seperti pada gambar 4.2.7.

successfully delete

User Name	Client	Form Name	Activity Type	Date	Notes
andika dwi chahya	Pizza Hut	Pizza Hut Kokas	Monthly Service	12-06-2023	monthly service pizza hut kokas tanggal 12 juni 2023
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023
andika dwi chahya	kopi kenangan	Form Kopi Kenangan Toiletries	Monthly Service	30-05-2023	monthly service 30 mei 2023

Gambar 4.2.7 Halaman *paging* dengan pesan sukses

```

public function delete(Request $request, $id)
{
    $trx = TrxService::where('id', $id)->first();
    $trxS = TrxServiceSigner::where('trx_service_id', $id)->get();

    $trxH = TrxServiceH::where('trx_service_id', $trx->id)->get();
    for($a = 0; $a < count($trxH); $a++){
        $trxHeader = TrxServiceH::where('id', $trxH[$a]->id)->first();
        $trxD = TrxServiceD::where('trx_service_h_id', $trxH[$a]->id)->get();
        for($i = 0; $i < count($trxD); $i++){
            $trxDetail = TrxServiceD::where('id', $trxD[$i]->id)->first();
            $trxDetail->delete();
        }
        $trxHeader->delete();
    }

    for ($c = 0; $c < count($trxS); $c++) {
        $trxSigner = TrxServiceSigner::where('id', $trxS[$c]->id)->first();
        $trxSigner->delete();
    }

    $trx->delete();

    return redirect('trx/')->with('message', ' successfully delete');
}

```

Segmen Program 4.2.5 Segment Program *delete transaction*

#### 4.1.3 Blackbox Testing

Pengujian *black box* berfokus kepada pengujian dengan melihat fungsi-fungsi yang ada dalam sistem tanpa harus mengetahui bagaimana fungsi tersebut dibuat sistemnya. Pada sistem ini, pengujian merujuk pada fungsi-fungsi yang dimiliki. Kemudian membandingkan hasil keluaran sistem dengan hasil yang diharapkan. Bila hasil yang diharapkan sesuai dengan hasil pengujian, hal ini berarti aplikasi sesuai dengan desain yang telah ditentukan sebelumnya. Bila belum sesuai maka perlu dilakukan pengecekan lebih lanjut dan perbaikan. Berikut ini pengujian *black box* terhadap sistem ini :

Tabel 4.1 *Blackbox Testing*

<i>Test ID</i>	<i>Use Case</i>	<i>Kondisi Pengujian</i>	<i>Hasil yang Diharapkan</i>	<i>Hasil</i>	<i>Status</i>	<i>Outstanding Issue</i>
1	<i>Login</i>	<i>Login Teknisi</i>	Menampilkan <i>dashboard</i> teknisi	<i>Dashboard</i> teknisi tampil setelah	<i>Meet expectation</i>	<i>N/A</i>

			setelah <i>input</i> <i>Username</i> dan <i>password</i>	memasuk kan <i>Username</i> dan <i>password</i>		
		<i>Login Sales</i>	Menampilkan <i>dashboard</i> <i>Sales</i> setelah <i>input</i> <i>Username</i> dan <i>password</i>	<i>Dashboard</i> teknisi tampil setelah memasukkan <i>Username</i> dan <i>password</i>	<i>Meet expec tation</i>	<i>N/A</i>
		<i>Login Admin</i>	Menampilkan <i>dashboard</i> admin setelah <i>input</i> <i>Username</i> dan <i>password</i>	<i>Dashboard</i> teknisi tampil setelah memasukkan <i>Username</i> dan <i>password</i>	<i>Meet expec tation</i>	<i>N/A</i>
2	Mengelola data <i>Master Client</i>	Klik <i>Menu Master Area</i>	Menampilkan <i>Menu Master Area</i>	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu Master Area</i>	<i>Meet expec tation</i>	<i>N/A</i>
		Menambahka n <i>Master Area</i>	<i>Master Area</i> ditambahkan dan tampil di dalam <i>Menu Master area</i>	Setelah menambahk an <i>Master area</i> , laman menampilkan data yang terupdate	<i>Meet expec tation</i>	<i>N/A</i>
		Klik <i>Menu Master Client</i>	Menampilkan <i>Menu Master Client</i>	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu Master Client</i>	<i>Meet expec tation</i>	<i>N/A</i>
		Menambahka n	<i>Master Client</i> ditambahkan	Setelah menambahka	<i>Meet expec tation</i>	<i>N/A</i>

		<i>Master Client</i>	dan tampil di dalam <i>Menu Master Client</i>	di <i>Master Client</i> , laman menampilkan data yang terupdate	<i>tation</i>	
3	Mengelola data <i>Master Activity Type</i>	Klik <i>Menu Master Activity Type</i>	Menampilkan <i>Menu Master Activity Type</i>	Setelah klik <i>Menu</i> , laman langsung	<i>Meet expectation</i>	N/A
				berganti tampilan ke <i>Menu Master Activity Type</i>		

4	Mengelola data <i>Master service Type</i>	Klik <i>Menu Master Service Type</i>	Menampilkan <i>Menu Master Service Type</i>	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu Master Service Type</i>	<i>Meet expectation</i>	N/A
		Menambahkan <i>Master Service Type</i>	<i>Master Service Type</i> ditambahkan dan tampil di dalam <i>Menu Master Service Type</i>	Setelah menambahkan <i>Master Service Type</i> , laman menampilkan data yang terupdate	<i>Meet expectation</i>	N/A
5	Mengelola data <i>Master teknisi</i>	Klik <i>Menu User</i>	Menampilkan <i>Menu User</i>	Setelah klik <i>Menu</i> , laman langsung berganti	<i>Meet expectation</i>	N/A

				tampilan ke <i>Menu User</i>		
		Menambahka n data <i>Master</i> teknisi pada <i>Menu User</i>	<i>Master</i> Teknisi ditambahkan dan tampil di dalam <i>Menu</i> <i>User</i>	Setelah menambahka n <i>Master</i> Teknisi, laman menampilkan data yang terupdate	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
6	Mengelola data <i>Master</i> <i>Sales</i>	Klik <i>Menu</i> <i>User</i>	Menampilkan <i>Menu User</i>	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu User</i>	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
		Menambahka n data <i>Master</i> <i>Sales</i> pada <i>Menu User</i>	<i>Master Sales</i> ditambahkan dan tampil di dalam <i>Menu</i> <i>User</i>	Setelah menambahka n <i>Master</i> <i>Sales</i> , laman menampilkan data yang terupdate	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
7	Mengelola <i>Transaction</i>	Klik <i>Menu</i> <i>Transaction</i>	Menampilkan data transaksi	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu</i> <i>Transaction</i>	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
		Menambahka n transaksi	Data transaksi ditambahkan dan tampil di dalam <i>Menu</i> <i>Transaction</i>	Setelah menambahka n data transaksi, laman menampilkan data yang terupdate	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
8	Mengelola <i>Form</i> <i>Question</i> <i>Setting</i>	Klik <i>Menu</i> <i>Form</i> <i>Question</i> <i>Setting</i>	Menampilkan <i>Form</i> <i>Question</i> <i>Setting</i>	Setelah klik <i>Menu</i> , laman langsung berganti tampilan ke <i>Menu</i> <i>Transaction</i>	<i>Meet</i> <i>expec</i> <i>tation</i>	N/A
		Menambahka	<i>Form</i>	Setelah	<i>Meet</i>	N/A

		n <i>Form Question Setting</i>	<i>Question Setting</i> ditambahkan dan tampil di dalam <i>Menu Form Question Setting</i>	menambahka n <i>Form Question Setting</i> , laman menampilkan data yang terupdate	<i>expectation</i>	
--	--	--------------------------------	---	---	--------------------	--