



## Iteration Day 5

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# Client Information

## Quick Summary:

- **Client:** MoveHealth, Financial Health Insurance Advisory Agency
- **Purpose of Project:** Streamline document handling and enhance advisory efficiency by using AI.

# Business Requirement

Enable Financial Advisors to better assist their clients with clear and easy to understand information about their health insurance.

- [BR1]
- The primary users of this product are Financial Advisors, who, in turn, serve their own clients. The goal is to support Financial Advisors in helping their clients understand the details of their health insurance. By developing new features and enhancing existing ones we can help Financial Advisors explain health insurance details in a clear, digestible manner for their clients. We believe that this is a business requirement because the goal is to improve client understanding of insurance plans, thus adding value to both Advisors and their clients. By creating tools to enable this we can build credibility in this domain and expand our user base with a trusted and valued service.

Bring customers an inviting and friendly product that is not difficult to utilize and provides valuable information.

- [BR2]
- It has been established that the client would like to tend to the demographic of user that is utilizing the product. With that we would like to deliver something that creates a inviting space for the user where they can thrive in using the service. We believe that this is a business requirement because if we can achieve our goal of improving accessibility for the client they are more likely to refer someone or come back to use the service again.

# Iteration 5 Features Overview

## Iteration 5 Features:

### 1. More Analyst Page Enhancements:

- Expand functionality to allow users to perform more actions on analyst pages.
- Update the design of the analysis summary page and copy share page.

### 2. Roth Conversion Visual Graph

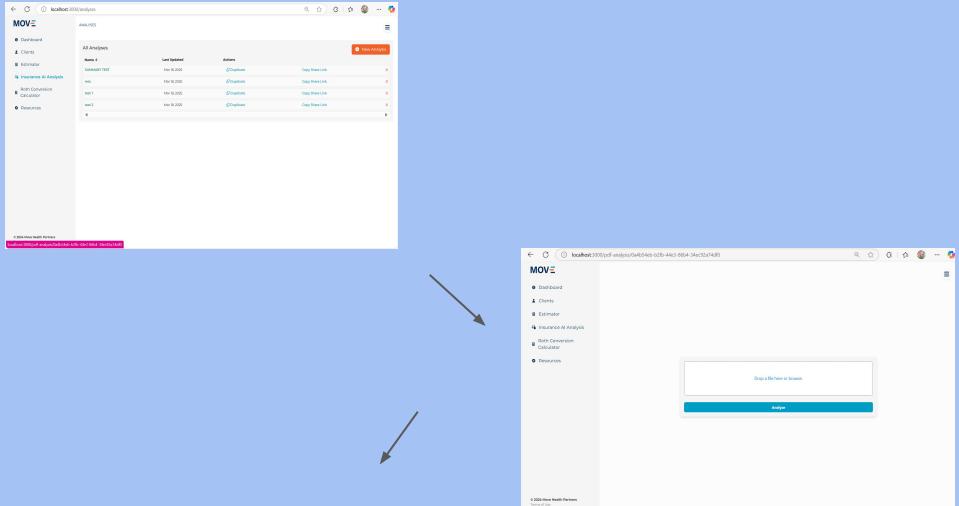
- Update the front end UI so that it looks more pretty.
- Add a feature to show the graph of the user's roth conversion estimates the 10 year plan

# Feature: Analysis page enhancements

**Purpose:** Enhances user experience by allowing seamless navigation between the Analyst AI Insurance Analyst page and its corresponding Summary page, ensuring that users can easily access relevant analysis details.

## Steps:

1. Navigate to the Analyst AI Insurance Analyst page.
2. Click on an Analyst name to be redirected to the Analyst page, with the Analyst ID displayed in the browser link.
3. Click on the Copy Share link to open the Summary page.
4. View the Summary page, which displays:
  - o The Analyst Name
  - o Pdf name
  - o The Analyst Description
  - o The Summary of the Analysis (unique to each analysis)

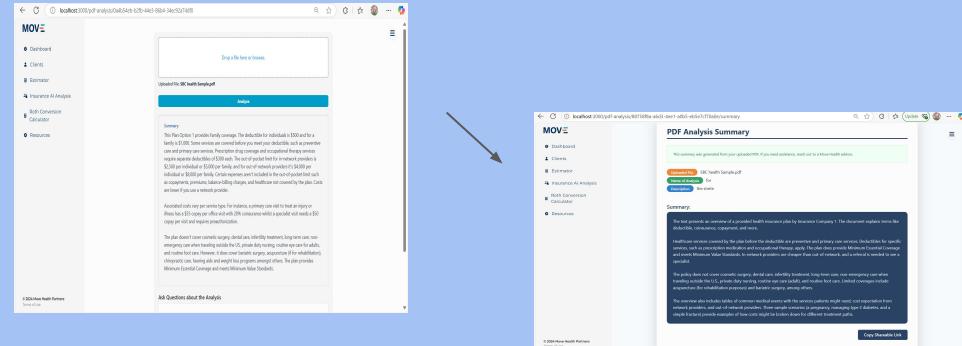


**Screenshot:** Display of the Analyst page navigation, highlighting the Summary page layout and its key details.

## Business Requirement: [BR2]

Ensure that users have an intuitive experience when accessing and sharing analysis details, making the system user-friendly and informative.

**Reasoning:** This feature improves user accessibility by enabling direct navigation between Analysts and their summaries. It provides a clearer structure for viewing analysis information, making it easier for users to understand and share relevant data. By streamlining this process, the feature enhances the overall usability and engagement of the system.



# Feature: Roth Conversion Comparison Tool

**Purpose:** Implements backend functionality for advisors to compare Roth conversion options.

**Steps:**

1. Open the Roth Conversion Tool.
2. Enter relevant financial details.
3. Compare results based on the provided calculations.
4. Displays results of the conversions.
5. 10 year graph of the results

**Screenshot:** Display a sample Roth conversion comparison result

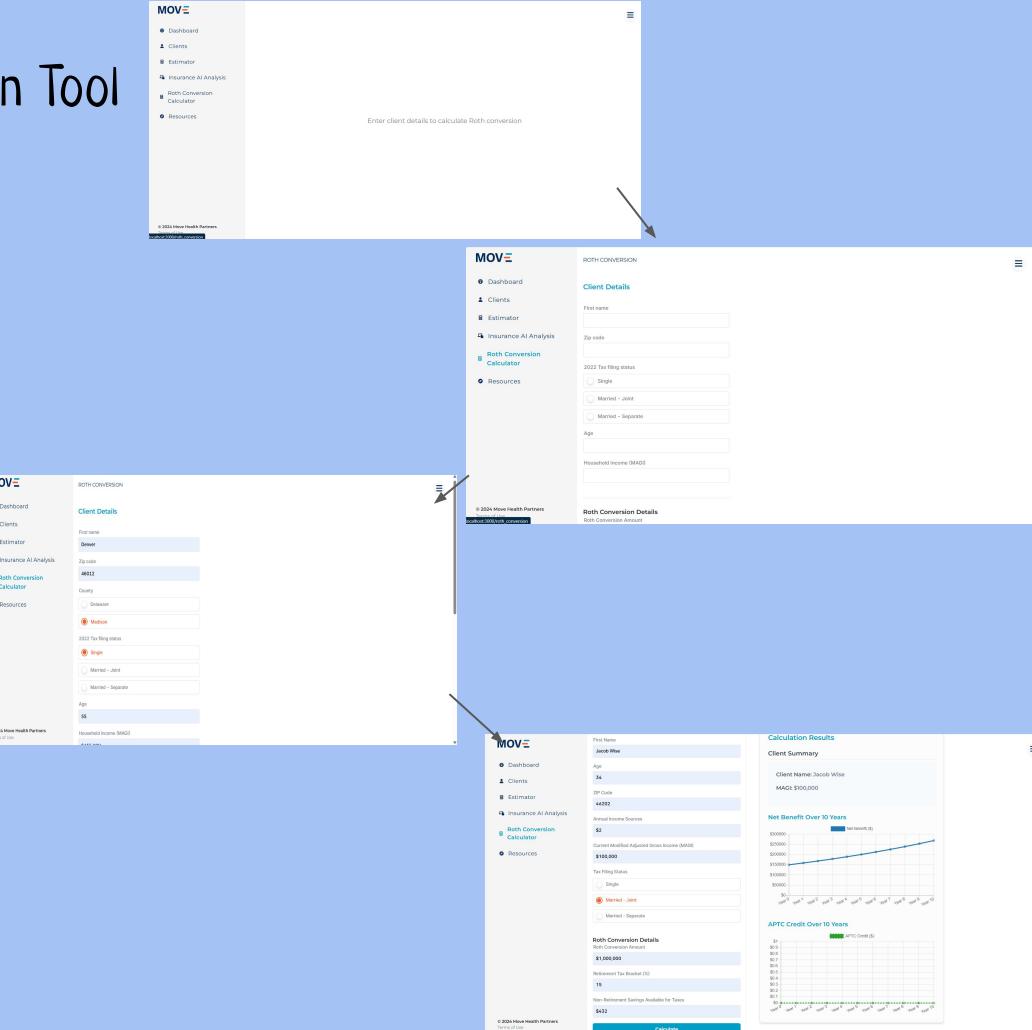
**Business Requirement: [BR2]**

Feature: Roth Conversion Comparison Tool

**Business Requirement: [BR1]**

Enable Financial Advisors to better assist their clients with clear and easy-to-understand information about their health insurance.

**Reasoning:** This tool provides financial advisors with a comparison of Roth conversion options, helping them present clear financial scenarios to their clients. It supports better decision-making and improves client understanding of financial planning.



# Client and Mentor FeedBack

## Mentor Feedback:

- Really liked the changes of summary.
- Gave us tips on the graph layout.

## Client Feedback:

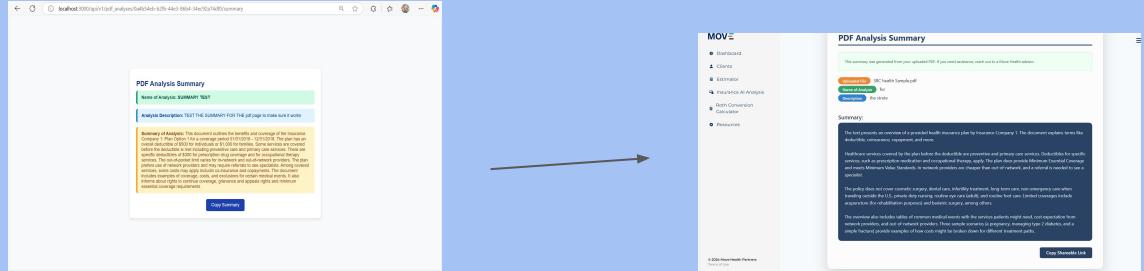
- Liked the copy share update.
- Really liked the graph.
- Gave feedback on calculations

# Aesthetic Improvements

Before

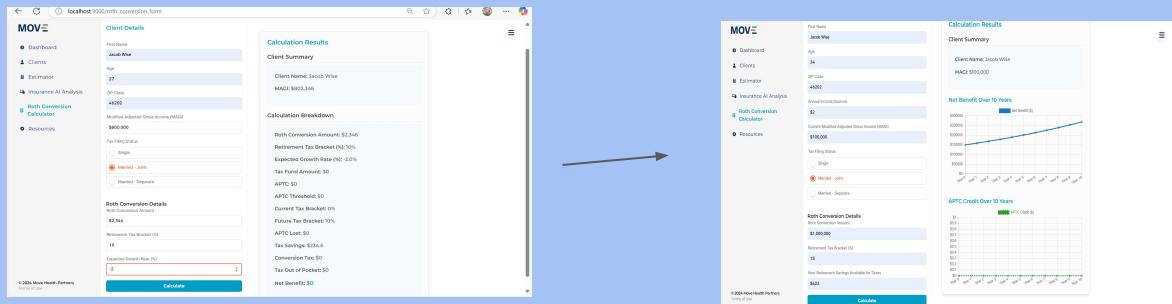
## Copy Share Improvements

- More pretty and matching the website style.
- Changed colors, outlines, heading



## Roth Conversion tool

- Made a graph,
- It just showed calculations at first now it shows the graph if results for the 10 year plan



## Modularity and Testing

# Modularity

- Followed the structure of file naming structure of code that was already present.
  - Followed same file naming scheme.



# Testing

- Front End Testing  
at least 90%  
coverage
  - Back end Testing  
83% coverage

- dashboard\_controller.rb
- dependents\_controller.rb
- estimations\_controller.rb
- onboarding\_controller.rb
- payments\_controller.rb
- pdf\_analyses\_controller.rb
- pdf\_chat\_controller.rb
- policies\_controller.rb
- roth\_conversions\_controller.rb
- surveys\_controller.rb

```
✓ pages
  JS analysis.test.js
  JS ChatBox.test.js
  JS pdf_analysis_summary.test.js
  JS PdfUploadAndAnalyze.test.js
```

```
JS setupTests.js
✗ unit
  ✓ document_validation_service_test.rb
  ✓ openAI_empty_test.rb
  ✓ openAI_nil_test.rb
  ✓ openAI_process_text_test.rb
  ✓ openAI_space_test.rb
  ✓ roth_conversion_test.rb
  ✓ roth_conversions_controller_test.rb
✗ test_helper.rb
tmp
```

```
IS onboardings.js
IS pdf_analysis_summary.js
IS pdf_upload_analyze.js
IS policies.js
IS policy_import.js
IS profile.js
IS public_estimation.js
IS request_reset_password.js
IS reset_password.js
IS root_embed_estimator.js
IS root_estimation.js
IS root_estimator.js
IS roth_conversion_form.js
IS roth_conversion.js
IS roth_conversions.js
```

# Development Environment

1. Have dev environment?:
  - Yes. Everyone has it and is up to date on branch
2. PR workflow?
  - EVERYONE has done a pull request at least 2 times.

0 Open ✓ 5 Closed		Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	Roth Conversion Logic Updated	#504 by treyesc was merged 3 days ago • Approved						
<input type="checkbox"/>	Insurance AI Analysis links work to display the pdf-analysis page	#503 by treyesc was merged on Jan 17 • Approved						
<input type="checkbox"/>	estimator test finished	#108 by treyesc was merged on Jan 29 • Approved						
<input type="checkbox"/>	Exit chat functionality and critical fix of chat box	#107 by treyesc was merged on Jan 24 • Approved						
<input type="checkbox"/>	Refactor commit	#106 by treyesc was merged on Jan 14 • Approved						

0 Open ✓ 7 Closed		Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	has function for 10 years roth calculations	#544 by tabloid5 was merged 2 weeks ago • Approved						
<input type="checkbox"/>	Bsu toli taxbrackets	#111 by tabloid5 was merged on Mar 18						
<input type="checkbox"/>	tax bracket to database	#110 by tabloid5 was merged on Mar 18						
<input type="checkbox"/>	Bsu toli rothlogic	#302 by tabloid5 was merged on Mar 17 • Approved						
<input type="checkbox"/>	Bsu trolt updates	#248 by tabloid5 was merged on Feb 24 • Approved						
<input type="checkbox"/>	Bsu toli roth	#208 by tabloid5 was merged on Feb 3 • Approved						
<input type="checkbox"/>	Bsu toli - Editing Analysis functions	#197 by tabloid5 was merged on Jan 29						

0 Open ✓ 6 Closed		Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	Bsu mia!	#372 by miguanara was merged 39 minutes ago • Approved						
<input type="checkbox"/>	Bsu mia!	#368 by miguanara was merged yesterday • Approved						
<input type="checkbox"/>	Mia branche	#365 by miguanara was merged 2 days ago • Approved						
<input type="checkbox"/>	Bsu mia!	#312 by miguanara was closed on Mar 19						
<input type="checkbox"/>	Bsu mia!	#304 by miguanara was merged on Mar 18 • Approved						
<input type="checkbox"/>	chat history preserved.	#198 by miguanara was merged on Jan 29 • Approved						

0 Open ✓ 7 Closed		Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	Bsu testing i5	#360 by Solomon-5 was merged yesterday • Approved						
<input type="checkbox"/>	add more tests	#309 by Solomon-5 was merged on Mar 18 • Approved						
<input type="checkbox"/>	testing changes	#301 by Solomon-5 was merged on Mar 17 • Approved						
<input type="checkbox"/>	fix guardrail prompt	#208 by Solomon-5 was merged on Feb 24 • Approved						
<input type="checkbox"/>	Bsu solomon3	#207 by Solomon-5 was merged on Feb 3 • Approved						
<input type="checkbox"/>	Bsu solomon2	#201 by Solomon-5 was merged on Jan 30 • Approved						
<input type="checkbox"/>	Bsu solomon1	#193 by Solomon-5 was merged on Jan 29 • Approved						

# Clean Code Practices

1. Kept the file structures the same.
2. Kept the file names the same format as client had them.
3. Small simple comments to explain code logic.
4. Broke up components to prevent giant files
5. No nested loops
6. Consistent code style

Mia

# Development Environment

Tobi

Caleb

The screenshot shows the Android Studio interface with the 'app' module selected. The left sidebar displays the project structure with packages such as 'com.example.myapp' containing 'Activity', 'Fragment', 'Model', and 'View' sub-packages. The bottom right pane shows the XML file 'activity\_main.xml' with code for a layout including a 'ConstraintLayout' and several 'Text' and 'Image' views. A status bar at the bottom indicates 'Imported successfully'.

# Solomon

Cyarina

```
○ P C:\Users\mialia\Desktop\Capstone\rmove> rails s
    → Booting Puma
    → Rails 6.0.6.1 application starting in development
    → Run `rails server --help` for more startup options
*** SIGUSR2 not implemented, signal based restart unavailable!
*** SIGUSR not implemented, signal based restart unavailable!
*** SIGUP not implemented, signal based logs reopening unavailable!
Puma starting in single mode...
* Version 4.3.12 (Ruby 3.0.0-p0), codename: Mysterious Traveller
* Min threads: 5, max threads: 5
* Environment: development
* Listening on tcp://[::]:3000
* Listening on tcp://[::]:3000
Be Ctrl-C to stop
```

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\reyes\Desktop\Capstone>move rails s
 => Booting Puma
 => Rails 6.0.6.1 application starting in development
 => Run 'rails server -help' for more startup options
 * [warn] SIGHUP not implemented, signal based restart unavailable!
 * [warn] SIGPOLL not implemented, signal based restart unavailable!
 * [warn] SIGURG not implemented, signal based logs reopening unavailable!
 Puma starting in single mode...
 * Version 4.3.12 (ruby 3.0.0-p0), codename: Mysterious Traveller
 * Min threads: 5, max threads: 5
 * Environment: development
 * Listening on tcp://(::):3000
 * Listening on tcp://[::1]:3000
 * Listening on tcp://127.0.0.1:3000
 Use Ctrl-C to stop
 |
```

```
Puma starting in single mode...
* Version 4.3.12 (ruby 3.0.0-p0), codename: Mysterious Traveller
* Min threads: 5, max threads: 5
* Environment: development
* Listening on tcp://[::1]:3000
* Listening on tcp://127.0.0.1:3000
Use Ctrl-C to stop
[]
```

# Teamwork/Retrospection

## *What we did and Lessons each member Learned*

**Mia:** I learn more about the database this iteration and about testing since i had to create some front end tests. For the database i discovered why front end was having issues with the summary recalling and saving to the correct analysis id. Because was the route being misnamed.. It was time consuming but i accomplished it and im proud.

**Tobi:** This iteration I learned more about Roth IRA conversions and also the feeling of wrapping up a project. It's been a wild feeling that we are going to be done working on this code soon and wanting to get everything perfected before then.

**Caleb:** This iteration I learned alot about Roth IRA conversions and how it can affect advance premium tax credits. I learned about all the moving money from your Traditional IRA to a Roth IRA and how that will affect taxes and APTC.

**Cyarina:** I learned about the roth conversion calculations and learned how to make a 10 year graph that shows the estimation over time.

**Solomon:** This iteration I felt a sense of relief and pride in what we were able to achieve for this project. It felt like only yesterday that we were struggling to set up our environments, but I'm proud of what we accomplished.

# FUN SLIDE :)

Albert Einstein: Insanity Is Doing the Same Thing Over and Over Again and Expecting Different Results

Machine learning:



## THE TWO STATES OF EVERY PROGRAMMER

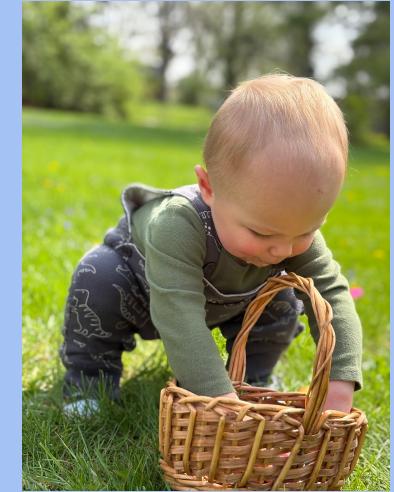


I AM A GOD.



I HAVE NO IDEA WHAT I'M DOING.

ME AT 4 AM TRYING TO FIGURE OUT  
WHAT'S WRONG WITH MY CODE  
WITHOUT CHANING ANYTHING



## Computer Science Students

Year 1

printf("Hello World")



Year 2

Data structures ,  
DBMS , Operating  
System



Year 3

I wanna go home

