

SMART SPENDING SYSTEM (SSS)

FALL 2017

CS5551: ADVANCED SOFTWARE ENGINEERING

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University of Missouri - Kansas City

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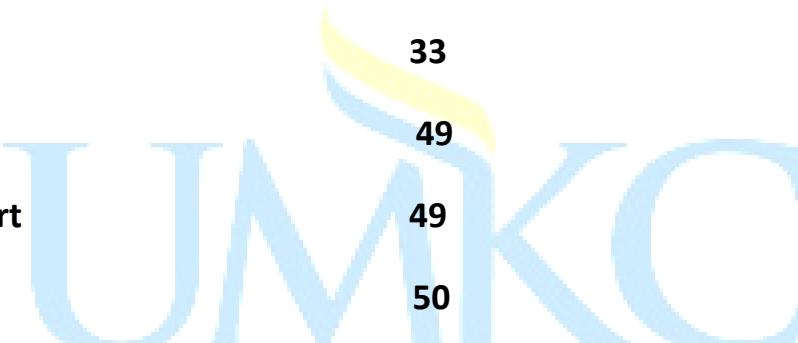
Video URL: <https://www.youtube.com/watch?v=Im9IugFjiBM>

Github URL: <https://github.com/SwetchaReddy/ASE-Project>

Zenhub URL: <https://github.com/SwetchaReddy/ASE-Project#boards>

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PROJECT DEPLOYMENT

INTRODUCTION

- This Expense Tracker application falls in the Finance Category and serves the important purpose of managing finances which is a very important part of one's life.
- The software product went through the design, development, and the testing phase as a part of the Software Development Lifecycle.
- The application's interface is designed using custom art elements, the functionality is implemented using Visual Studio software, and the phase of testing the product was accomplished successfully.
- The application is not much user intensive but just comprises of having them enter the expense amount, date, category, merchant and other optional attributes.
- With this entered information, the user is able to see the expense details daily, weekly, monthly, and yearly in figures, graphs.

FEATURES

This system comprises of 9 features as follows:

1. Registration:

- The user has to register with his/her basic registration details and need to create login credentials, which will be used to sign in.

2. Login:

- Using the login credent.

3. Add Income:

- A user can add income details of the current month from various sources for his/her records.

4. View Income:

- The user can see a list of incomes, which were added in current month.
- Graphical representation of income will be displayed to the user for better understanding.

5. Add Expense:

- A user can add expense details of the current month for his/her records.

6. View Expense:

- The user can see a list of expenses, which were spent this month.
- Graphical representation of income will be displayed to the user for better understanding.



7. Currency Converter:

The user has to fill all the required fields to add special expenses and can choose only current month date.



EXISTING SYSTEM

❖ Problem with current scenario

- At the instant, there is no as such complete solution present easily or we should say free of cost which enables a person to keep a track of its daily expenditure easily.
- To do so a person has to keep a log in a diary or in a computer, also all the calculations needs to be done by the user which may sometimes results in errors leading to losses.
- Due to lack of a complete tracking system, there is a constant overload to rely on the daily entry of the expenditure and total estimation till the end of the month.

• Drawbacks of the existing system

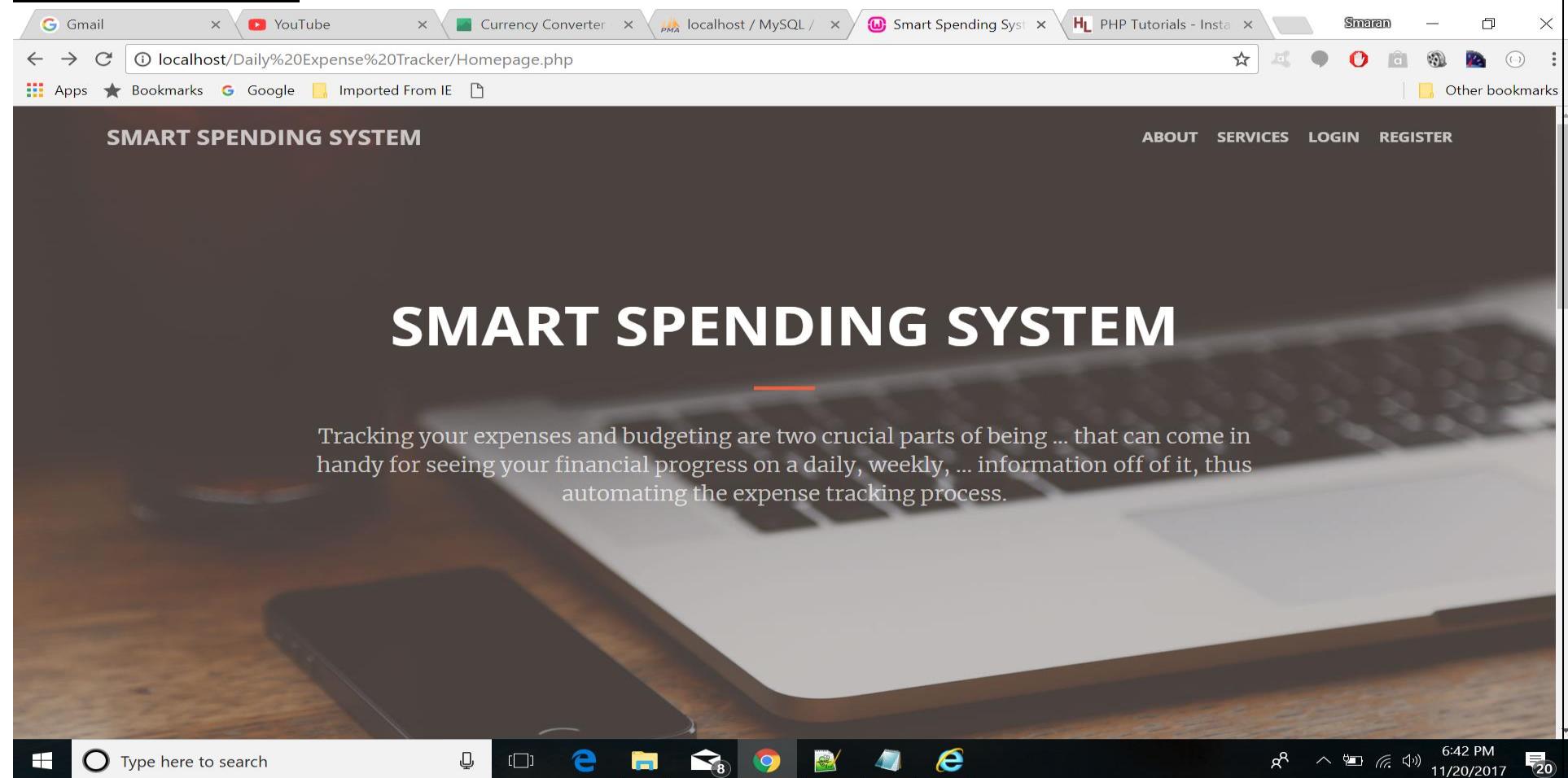
- Maintenance of the system is very difficult.
- There is a possibility for getting inaccurate results.
- User friendliness is very less.
- It consumes more time for processing the activities.

PROPOSED SYSTEM

- In an effort to fix the above addressed problems, we designed a system that would make the task of keeping the expenses in check, efficient and delight task.
- This advanced system helps the user to maintain a record of his incomes and expenses.
- User first need to register using basic registration details and need to create a valid login id and password.
- After successful login, system allows the user to see the income and expense graph in the form of line chart for the selected month.
- The system makes the users work easier by calculating the current months saving, income and expenses.
- User need to add income details acquired from various sources, which can be then used for expense and saving purpose.
- User can anytime view the added income and expense details.
- A graphical representation of income and expense is shown for better understandings.
- Currency conversion plays an important role when it a user migrates from country to country.
- System allows user to select the desired country to convert all its incomes and expenses according to the selected country currency.

PROJECT DEMO

APPLICATION HOME PAGE



The screenshot shows a web browser window with multiple tabs open at the top. The active tab is for 'localhost/Daily%20Expense%20Tracker/Homepage.php'. The browser interface includes standard controls like back, forward, and search, along with a toolbar for apps, bookmarks, and Google search.

SMART SPENDING SYSTEM

We've got what you need!

Tracking your expenses and budgeting are two crucial parts of being ... that can come in handy for seeing your financial progress on a daily, weekly, ... information off of it, thus automating the expense tracking process.

GET STARTED!



SMART SPENDING SYSTEM

ABOUT SERVICES LOGIN REGISTER

At Your Service

Income
You can easily add income from various sources..

Expense
Any type of expenses can be easily added and updated here.

Income-Expense Curve
You can check the income and expenditure differences every day easily.

Savings
How much you save is very important.

Type here to search

6:43 PM
11/20/2017

LOGIN PAGE

The screenshot shows a web browser window with the title "LOGIN PAGE" at the top. The browser's address bar displays the URL "localhost/Daily%20Expense%20Tracker/Homepage.php". The main content area shows the "SMART SPENDING SYSTEM" logo and a tagline "experience differences every day easily." Below this, there is a "Sign In" form with fields for "Username" and "Password", and a green "LOGIN" button. The browser's toolbar at the bottom includes icons for various applications like File Explorer, Mail, and Internet Explorer.

SMART SPENDING SYSTEM

experience differences every day easily.

Sign In

Username

Password

LOGIN

Gmail YouTube Currency Converter localhost / MySQL Smart Spending System PHP Tutorials - Insta Smaran

localhost/Daily%20Expense%20Tracker/Homepage.php

Apps Bookmarks Google Imported From IE Other bookmarks

ABOUT SERVICES LOGIN REGISTER

Windows Start Type here to search e File Explorer Mail Chrome Internet Explorer Paint 6:43 PM 11/20/2017

REGISTER PAGE

The screenshot shows a web browser window with the URL `localhost/Daily%20Expense%20Tracker/register.php` in the address bar. The page title is "Smart Spending System". The main content is a registration form titled "Registration". The form fields are:

- ID: 4
- Name: (empty input field)
- EmailId: (empty input field)
- Contact: (empty input field)
- Address: (empty input field)
- Country: A dropdown menu with the placeholder "--Select Country--".
- Username: (empty input field)
- Password: (empty input field)

A red "REGISTER" button is located at the bottom right of the form.



ADD INCOME

The screenshot shows a web browser window with multiple tabs open at the top. The active tab is titled "localhost/Daily%20Expense%20Tracker/addincome.php". The browser interface includes standard navigation buttons, a search bar, and a bookmarks bar with items like "Apps", "Bookmarks", "Google", and "Imported From IE".

The main content area displays the "Smart Spending System" logo and a navigation menu with links: Add Income, Add Expense, View Income, View Expense, Graph, Savings, and Change Currency. A "Logout" link is also present.

The central part of the page is titled "Add Income" and contains a form with three input fields: "Transaction Id" (containing the value "7"), "Amount" (empty), and "Source" (empty). A red "Submit" button is located at the bottom right of the form.

The desktop taskbar at the bottom of the screen shows various pinned icons, including File Explorer, Mail, Google Chrome, Internet Explorer, and Paint. The system tray indicates the date as 11/20/2017 and the time as 6:45 PM.

The screenshot shows a Microsoft Windows desktop environment. At the top, a taskbar displays several open applications: Gmail, YouTube, Currency Converter, PMA localhost / MySQL, Smart Spending System, PHP Tutorials - Insta, Smaran, and others. The Smart Spending System application is currently active, showing a "Add Income" form. The form fields are: Transaction Id (7), Amount (1000), and Source (casino). A red "Submit" button is at the bottom right of the form. The background of the desktop is a blurred image of a laptop keyboard and a smartphone on a wooden surface. The system tray at the bottom right shows the date (11/20/2017), time (6:45 PM), battery level, signal strength, and other system icons.

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

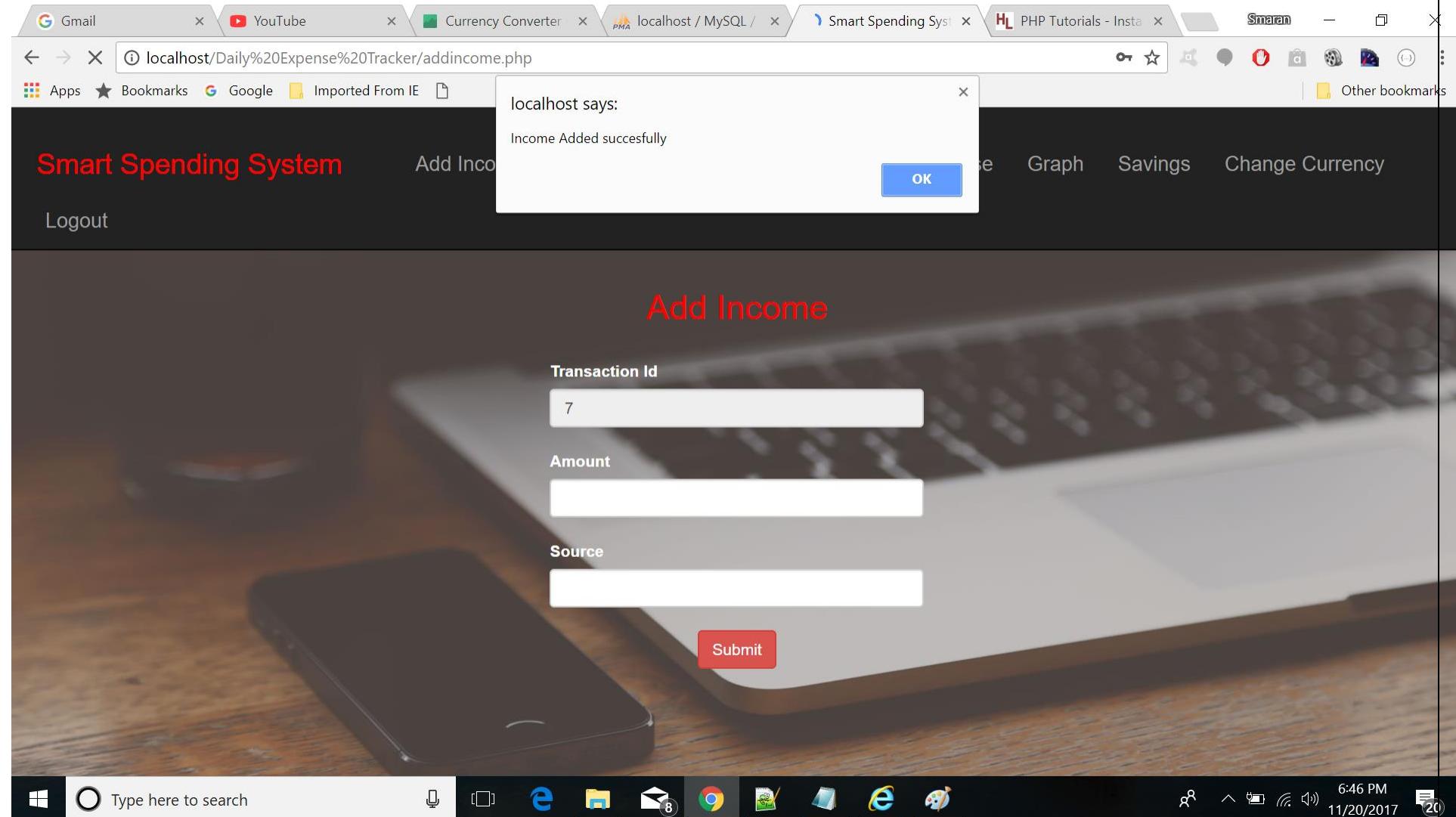
Add Income

Transaction Id
7

Amount
1000

Source
casino

Submit

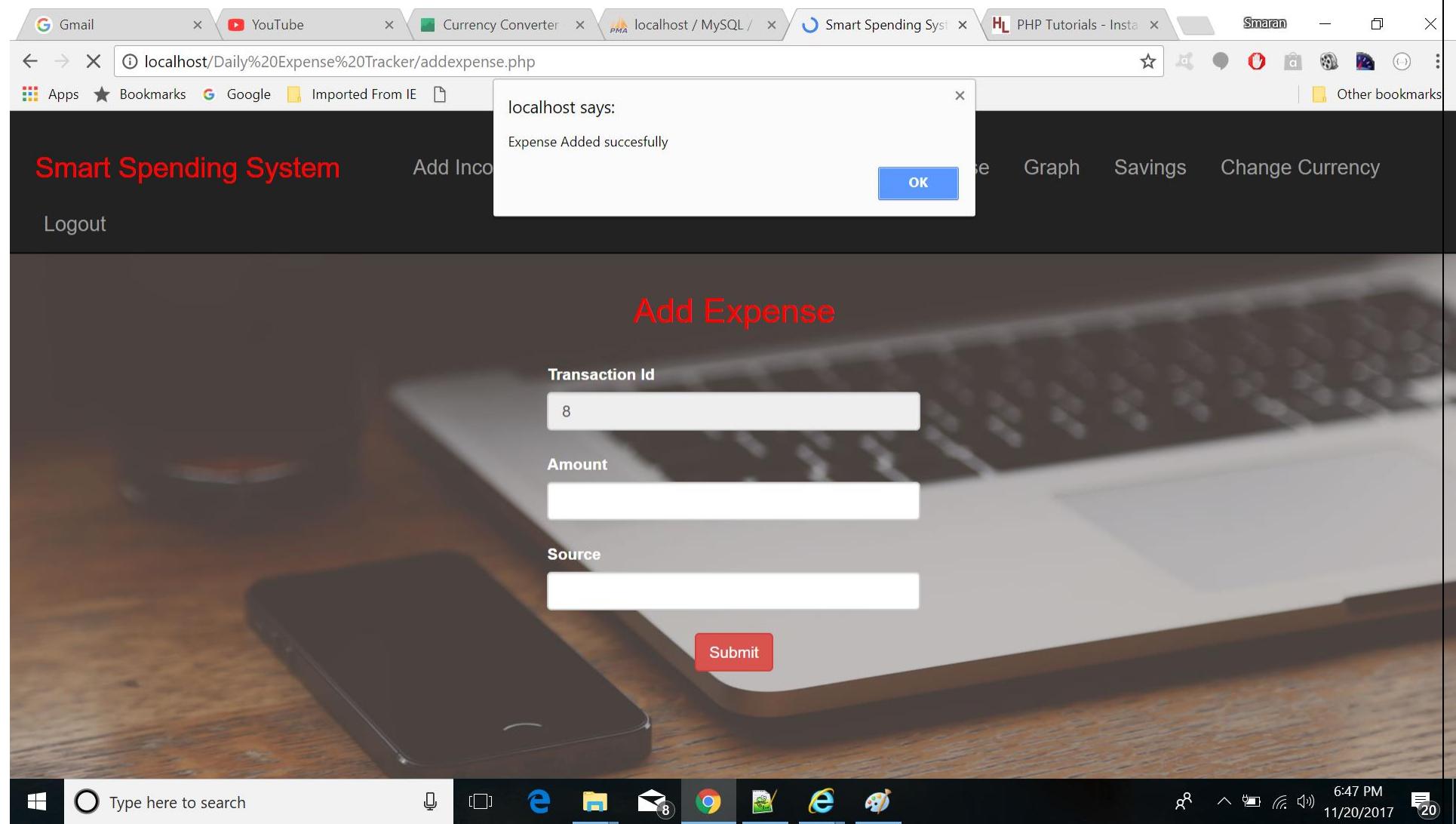


ADD EXPENSE

The screenshot shows a Microsoft Windows desktop environment. A web browser window is open to `localhost/Daily%20Expense%20Tracker/addexpense.php`. The page title is "Smart Spending System". The main content is a form titled "Add Expense" with the following fields:

- Transaction Id: 8
- Amount: 500
- Source: groceries

A red "Submit" button is located at the bottom right of the form. The browser's address bar shows the current URL. The taskbar at the bottom contains icons for File Explorer, Mail, and Internet Explorer. The system tray shows the date and time as 11/20/2017, 6:46 PM.



VIEW INCOME

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Month: --Select Month--

Year: _____

Search

Income Details

TransactionID	UserId	Currency	Amount	Source	Date
5	2	AUD	101	salary	2017-11-16
7	2	AUD	1000	casino	2017-11-21

VIEW EXPENSE

The screenshot shows a web browser window with the title "Smart Spending System". The page features a navigation bar with links: Add Income, Add Expense, View Income, View Expense, Graph, Savings, and Change Currency. A "Logout" link is also present. Below the navigation bar is a search form with dropdown menus for "Month" (set to "--Select Month--") and "Year" (empty), and a red "search" button. The main content area is titled "Expense Details" and contains a table with the following data:

TransactionID	UserId	Currency	Amount	Source	Date
5	2	AUD	2	groceries	2017-11-16
6	2	AUD	1	tip	2017-11-16
8	2	AUD	500	groceries	2017-11-21

At the bottom of the browser window, the Windows taskbar is visible, showing icons for File Explorer, Mail, Google Chrome, Internet Explorer, and Paint. The system tray indicates the date as 11/20/2017 and the time as 6:48 PM.

VIEW SAVINGS

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Saving Details

Month: --Select Month--

Year: _____

Search

localhost/Daily%20Expense%20Tracker/viewbalance.php

6:49 PM 11/20/2017

The screenshot shows a web browser window with the URL `localhost/Daily%20Expense%20Tracker/viewbalance.php` in the address bar. The browser has several tabs open, including Gmail, YouTube, Currency Converter, localhost / MySQL, Smart Spending System, PHP Tutorials - Insta, and Smaran. The main content area is titled "Smart Spending System" and shows "Saving Details" for November 2017. The page includes dropdown menus for "Month" (set to 11) and "Year" (set to 2017), a "Search" button, and three input fields displaying financial data: "Total Income" (56101), "Total Expense" (10680), and "Savings" (45421). The background of the page features a blurred image of a laptop keyboard and a smartphone on a wooden surface.

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Saving Details

Month: 11

Year: 2017

Search

Total Income: 56101

Total Expense: 10680

Savings: 45421

Windows Taskbar:

- Type here to search
- File Explorer
- Edge
- File Manager
- Email
- Google Chrome
- Paint
- Snipping Tool

System tray:

- Speaker icon
- Network icon
- Power icon
- Date and time: 6:49 PM
11/20/2017
- Notification icon (20)

INCOME-EXPENSE CURVE

The screenshot shows a web browser window with the URL `localhost/Daily%20Expense%20Tracker/graph.php`. The browser has several tabs open, including Gmail, YouTube, Currency Converter, localhost / MySQL, Smart Spending System, PHP Tutorials - Insta, Smaran, and others. The main content area displays the "Smart Spending System" logo and navigation links: Add Income, Add Expense, View Income, View Expense, Graph, Savings, and Change Currency. Below this is a "Logout" link. The central feature is a form titled "Income-Expense Curve" with fields for "Month" (a dropdown menu showing "--Select Month--") and "Year" (an input field), and a red "Search" button. The background of the page features a blurred image of a laptop keyboard and a smartphone on a wooden surface. At the bottom of the screen, the Windows taskbar is visible, showing the Start button, a search bar with the placeholder "Type here to search", and icons for File Explorer, Edge, Mail, Google Chrome, and Paint. The system tray shows the date and time as 11/20/2017 6:48 PM.

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Income-Expense Curve

Month: 11

Year: 2017

Search

Gmail YouTube Currency Converter localhost / MySQL / Smart Spending System PHP Tutorials - Insta Smaran

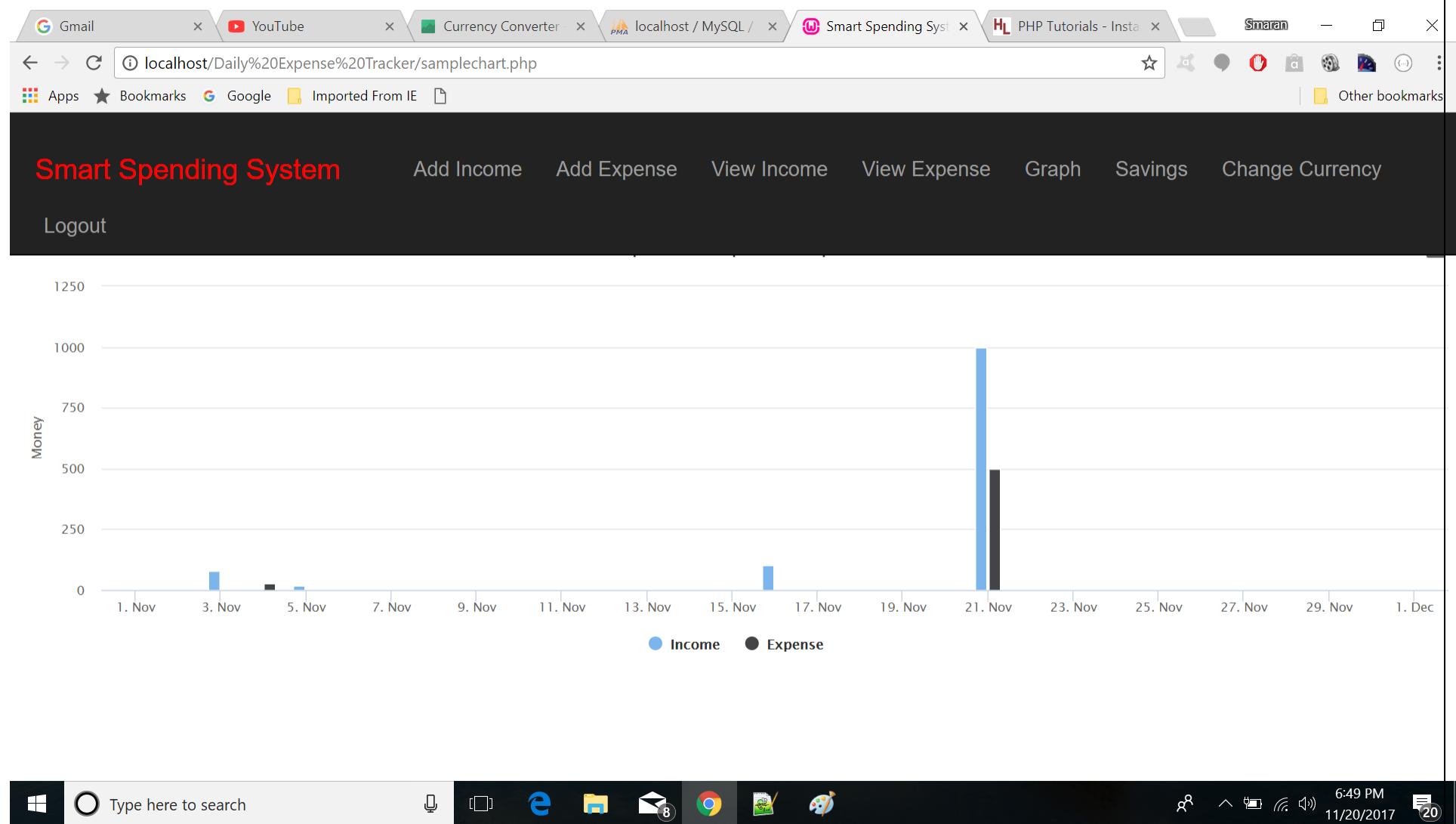
localhost/Daily%20Expense%20Tracker/graph.php

Apps Bookmarks Google Imported From IE Other bookmarks

Windows Type here to search

File Explorer Edge Mail Google Chrome Paint

6:48 PM 11/20/2017 20



CURRENCY SELECTION

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Currency Change

Country

--Select Country--

Submit

Type here to search

File Explorer Edge Mail Google Chrome Paint

11/20/2017 6:50 PM

The screenshot shows a Microsoft Windows desktop environment. At the top, a taskbar displays several open applications: Gmail, YouTube, Currency Converter, localhost / MySQL, Smart Spending (which is the active tab), PHP Tutorials, south african cu, and Smaran. Below the taskbar is a ribbon bar with icons for Apps, Bookmarks, Google, and Imported From IE, along with a "Other bookmarks" folder.

The main content area is a web browser window titled "localhost/Daily%20Expense%20Tracker/currencychange.php". The page itself has a dark header with the title "Smart Spending System" and navigation links for Add Income, Add Expense, View Income, View Expense, Graph, Savings, and Change Currency. It also includes a "Logout" link. The main body of the page is titled "Currency Change" and features a form with a dropdown menu labeled "Country" containing "South Africa", a text input field labeled "Currency" containing "ZAR", and a red "Submit" button. The background of the page is a blurred image of a laptop keyboard and a smartphone on a wooden surface.

At the bottom of the screen, the Windows Start button is visible, followed by a search bar with the placeholder text "Type here to search". To the right of the search bar are icons for File Explorer, Edge, Mail, and Google Chrome. On the far right of the taskbar, there are system status icons for battery, signal strength, and volume, along with the current time "6:50 PM" and date "11/20/2017".

PROJECT PRESENTATION SLIDES

SMART SPENDING SYSTEM

TEAM 12

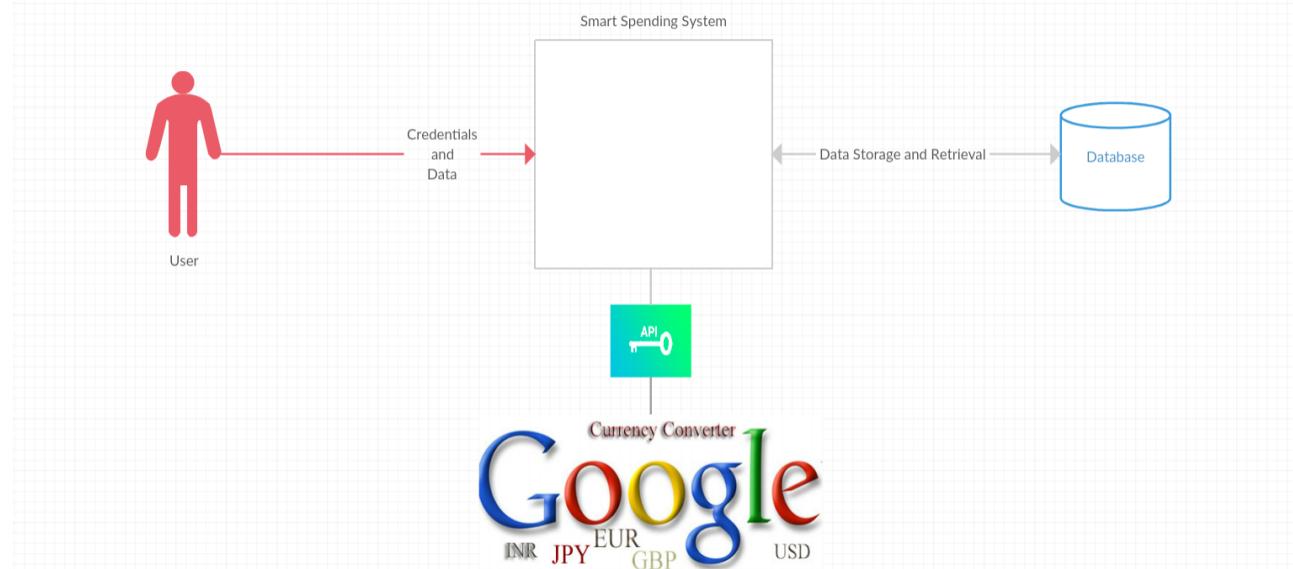
**AVINASH BANALA-5
SAI SMARAN CHINTHALA-11
RAHUL NAGAVALLI-28
SWETCHA REDDY VANGALA-41**

SIGNIFICANCE

Smart Spending System assist user to

- keep a virtual track on his or her income, expenditure and savings in different months
- view the Income-Expense graph for different months
- utilize the benefits of it in any country

ARCHITECTURE DIAGRAM



TECHNOLOGIES USED



APPLICATION FEATURES

User can

- Signup and login
- Add one's income and view it later
- Add expenditure and review later
- View savings which are generated by the application based on user's income and expenditure
- View the Income-expense graph in a month
- Change currency

PROJECT PROPOSAL

GOAL:

To develop an application that helps people to keep a track on their income, expenditure and savings.

OBJECTIVES:

- The main aim of this project is to keep a virtual track on the money being spent by adding past, future or recurring transactions and categorizing them.
- It can be used to alert the user when he exceeds his pre-planned monthly limit or if his present month's expenditure exceeds that of his previous month.

SYSTEM FEATURES:

- Detailed info graphics.
- Friendly email reminders to others.
- Easily accessible notifications.



SIGNIFICANCE:

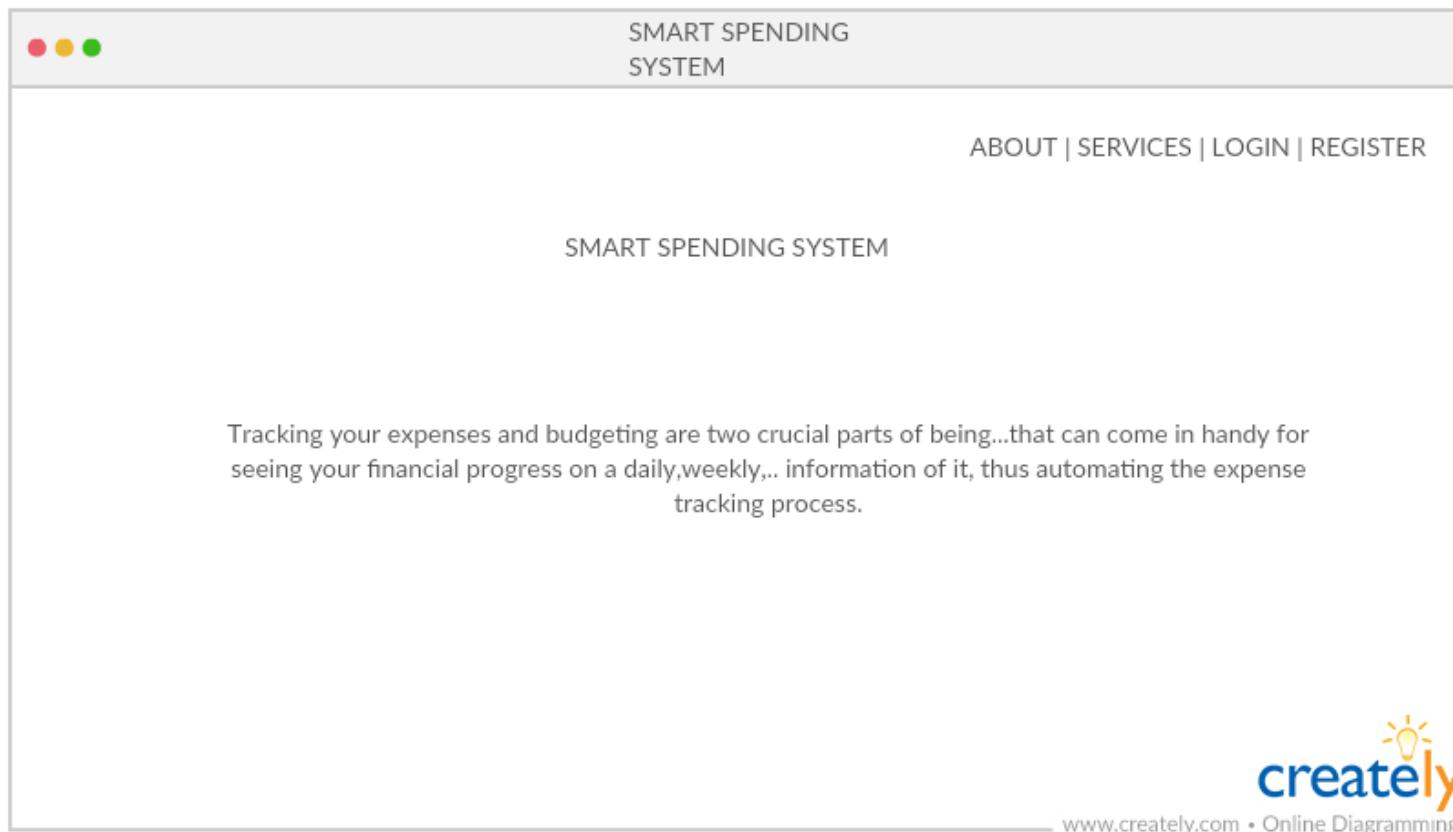
Like Fitbit tracks your health, this application tracks your expenditure, helps you plan your budget. A country needs a budget plan, similarly even our income also can be used effectively if we have a budget plan. This application is an aid for our budget plan.

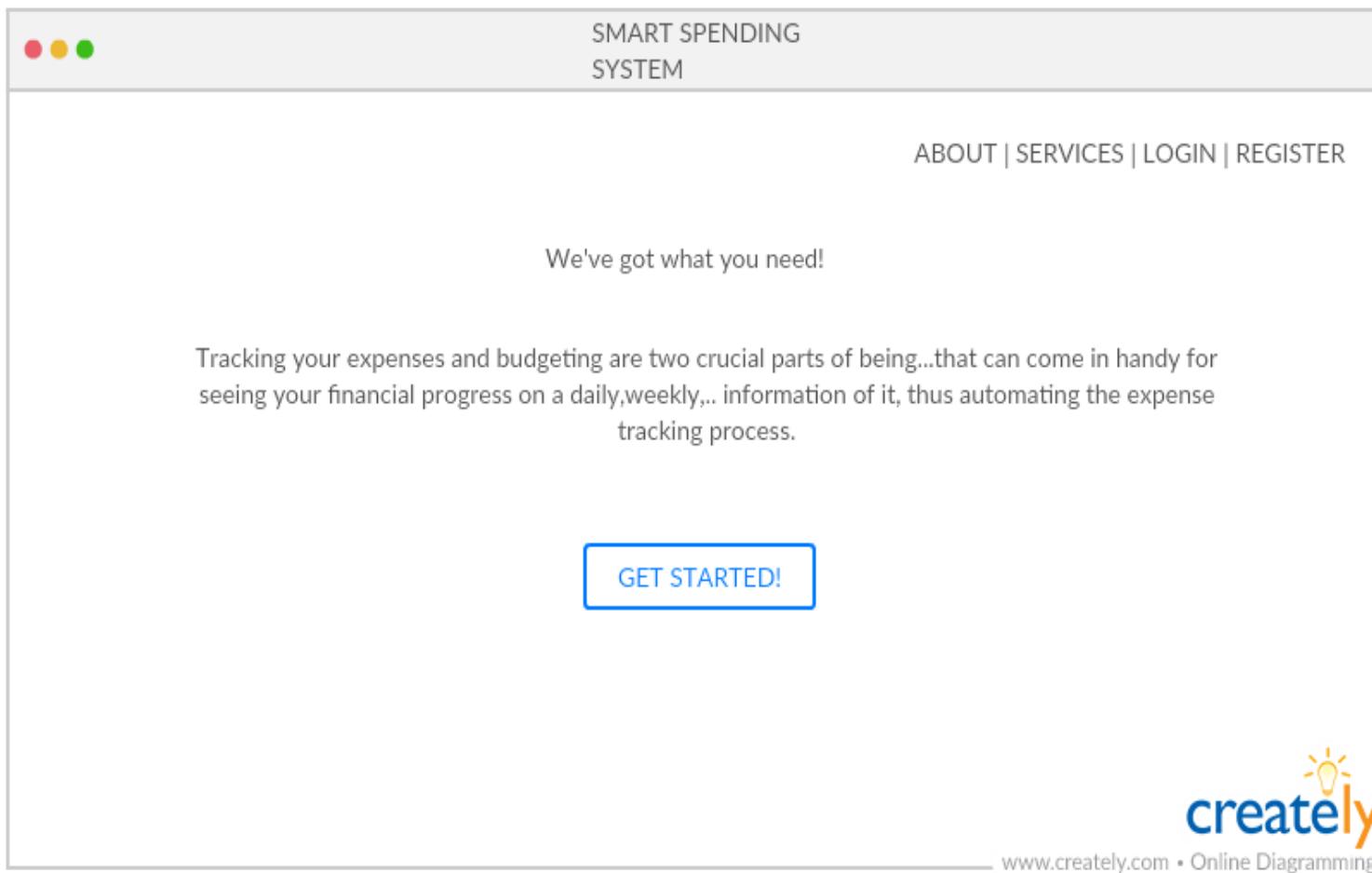
PROJECT PLAN

DESIGN

WIREFRAMES

WELCOME PAGE





The image shows a landing page for a "SMART SPENDING SYSTEM". At the top left is a small icon of three colored dots (red, yellow, green). To its right, the text "SMART SPENDING SYSTEM" is displayed in a sans-serif font. On the far right of the header are links for "ABOUT | SERVICES | LOGIN | REGISTER". Below the header, a large central text area contains the message "We've got what you need!" followed by a detailed description of the system's purpose: "Tracking your expenses and budgeting are two crucial parts of being...that can come in handy for seeing your financial progress on a daily, weekly,.. information of it, thus automating the expense tracking process." At the bottom of this central area is a blue rectangular button with the white text "GET STARTED!". At the very bottom right of the page is the "creately" logo, which includes a stylized lightbulb icon above the word "creately" in blue and orange, and the website address "www.creately.com • Online Diagramming" below it.

SMART SPENDING
SYSTEM

ABOUT | SERVICES | LOGIN | REGISTER

We've got what you need!

Tracking your expenses and budgeting are two crucial parts of being...that can come in handy for seeing your financial progress on a daily, weekly,.. information of it, thus automating the expense tracking process.

GET STARTED!

creately

www.creately.com • Online Diagramming



SMART SPENDING SYSTEM

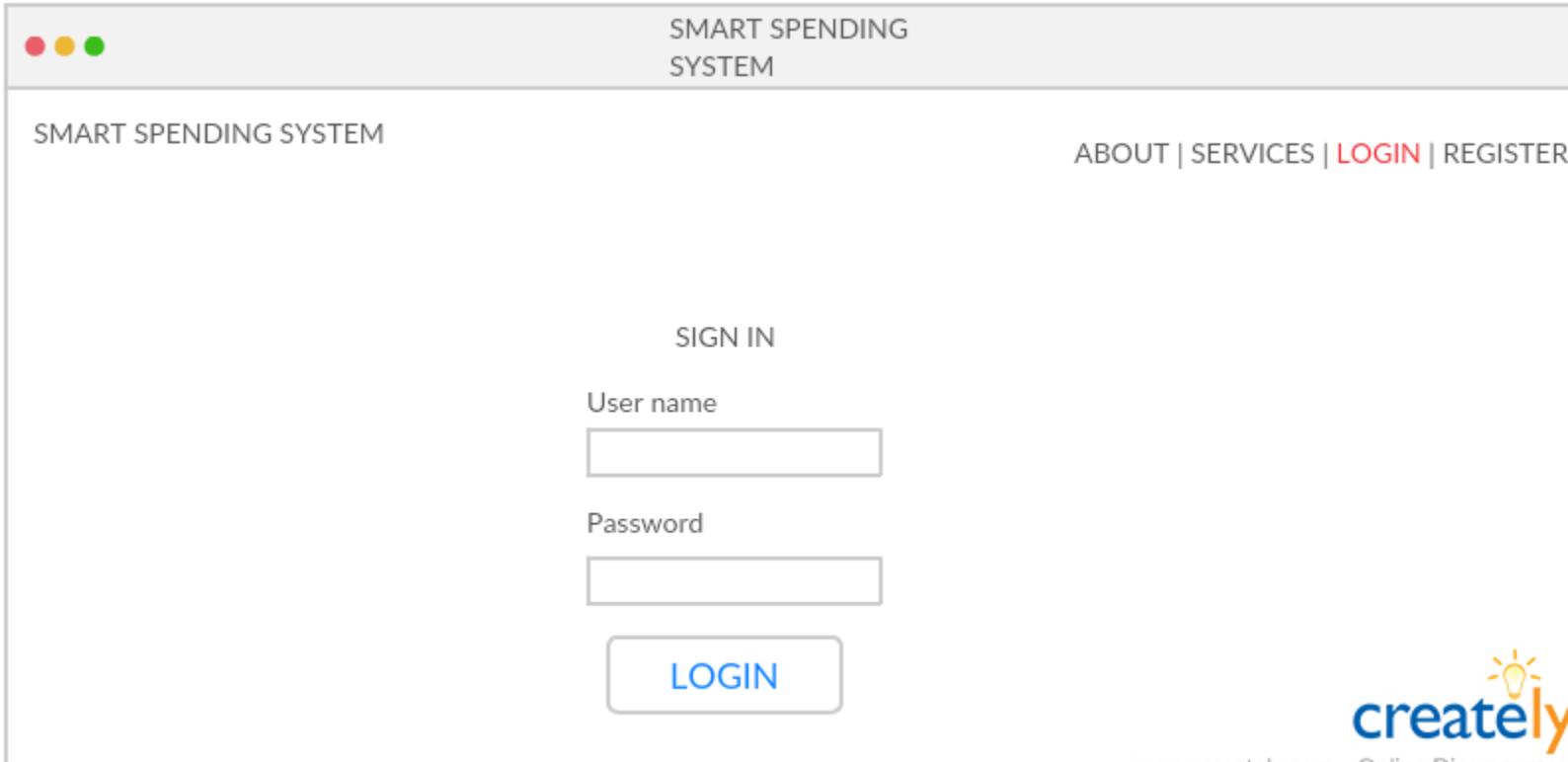
[ABOUT](#) | [SERVICES](#) | [LOGIN](#) | [REGISTER](#)

AT YOUR SERVICE!

INCOME You can easily add income from various sources..	EXPENSE Any type of expenses can be easily added and updated here.	INCOME EXPENSE CURVE You can check the income and expenditure differences every day easily.	SAVINGS How much you save is very important
---	--	---	---


www.creately.com • Online Diagramming

LOGIN PAGE



The image shows a login page for the "SMART SPENDING SYSTEM". At the top left are three colored dots (red, yellow, green). At the top right is the system name "SMART SPENDING SYSTEM" and below it, a navigation bar with links: "ABOUT | SERVICES | **LOGIN** | REGISTER". The main area is titled "SIGN IN" and contains two input fields: "User name" and "Password", each with an associated text input box. Below these is a blue "LOGIN" button. In the bottom right corner of the page, there is a logo for "creately" featuring a stylized lightbulb icon above the word "creately" in blue and orange.

SMART SPENDING
SYSTEM

SMART SPENDING SYSTEM

ABOUT | SERVICES | **LOGIN** | REGISTER

SIGN IN

User name

Password

LOGIN

creately

www.creately.com • Online Diagramming

ADD INCOME

The screenshot shows the 'SMART SPENDING SYSTEM' interface. At the top right, there are navigation links: 'Add Income', 'Add Expense', 'View Income', 'View Expense', 'Graph', 'Savings', 'Change Currency', and 'Log Out'. Below these, the title 'SMART SPENDING SYSTEM' is repeated. The main content area is titled 'Add Income'. It contains three input fields labeled 'Transaction Id', 'Amount', and 'Source', each with a corresponding empty text input box. A blue 'Submit' button is located at the bottom of the form.

SMART SPENDING SYSTEM

SMART SPENDING SYSTEM

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Log Out

Add Income

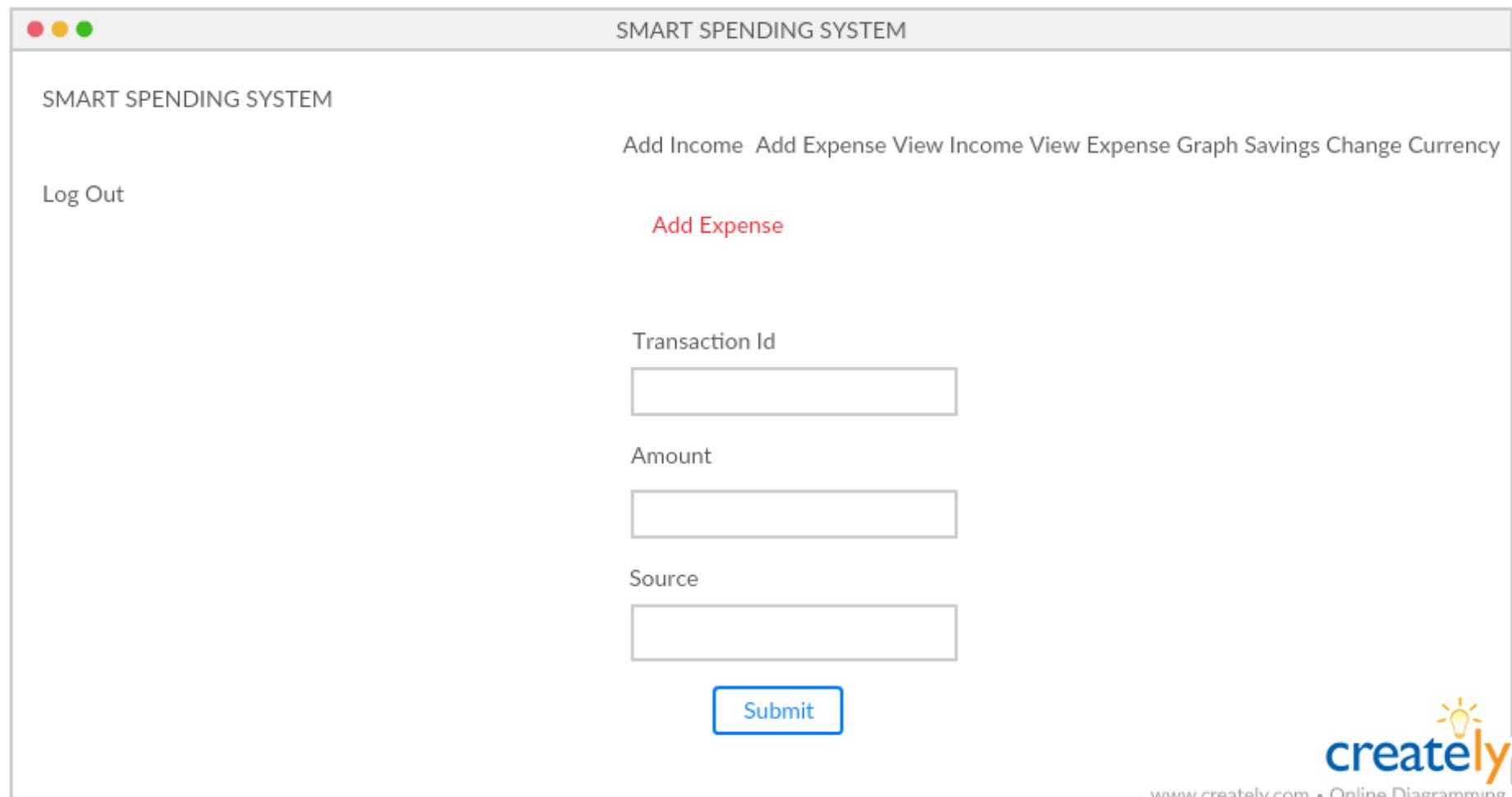
Transaction Id

Amount

Source

Submit

ADD EXPENSE



The screenshot shows a window titled "SMART SPENDING SYSTEM". In the top right corner, there are three colored dots (red, yellow, green). Below the title, the system name "SMART SPENDING SYSTEM" is displayed again. On the left, there is a "Log Out" link. In the center, there is a red link labeled "Add Expense". The form consists of four input fields: "Transaction Id", "Amount", "Source", and a "Submit" button. The "Submit" button is highlighted with a blue border.

SMART SPENDING SYSTEM

SMART SPENDING SYSTEM

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Log Out

Add Expense

Transaction Id

Amount

Source

Submit

VIEW INCOME

SMART SPENDING SYSTEM

SMART SPENDING SYSTEM Add Income Add Expense View Income View Expense Graph Savings Change Currency Log Out

Month

Year

Income Details

Transaction Id	User Id	Currency	Amount	Source	Date
5	2	AUD	101	salary	2017-11-16
7	2	AUD	1000	casino	2017-11-21

 www.creately.com • Online Diagramming

VIEW EXPENSE

SMART SPENDING SYSTEM

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Log Out

Month

Year

Expense Details

Transaction Id	User Id	Currency	Amount	Source	Date
5	2	AUD	2	groceries	2017-11-16
6	2	AUD	1	tip	2017-11-16
8	2	AUD	500	groceries	2017-11-21

INCOME EXPENSE CURVE

The image shows a screenshot of a web application titled "SMART SPENDING SYSTEM". At the top right, there are navigation links: "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", "Change Currency", and "Log Out". Below these, the title "Income - Expense Curve" is displayed in red. The main form has two dropdown menus: "Month" (set to "Select Month") and "Year" (empty). A blue "Search" button is located below the year input field. The entire interface is contained within a light gray box.

SMART SPENDING SYSTEM

SMART SPENDING SYSTEM

Add Income Add Expense View Income View Expense Graph Savings Change Currency

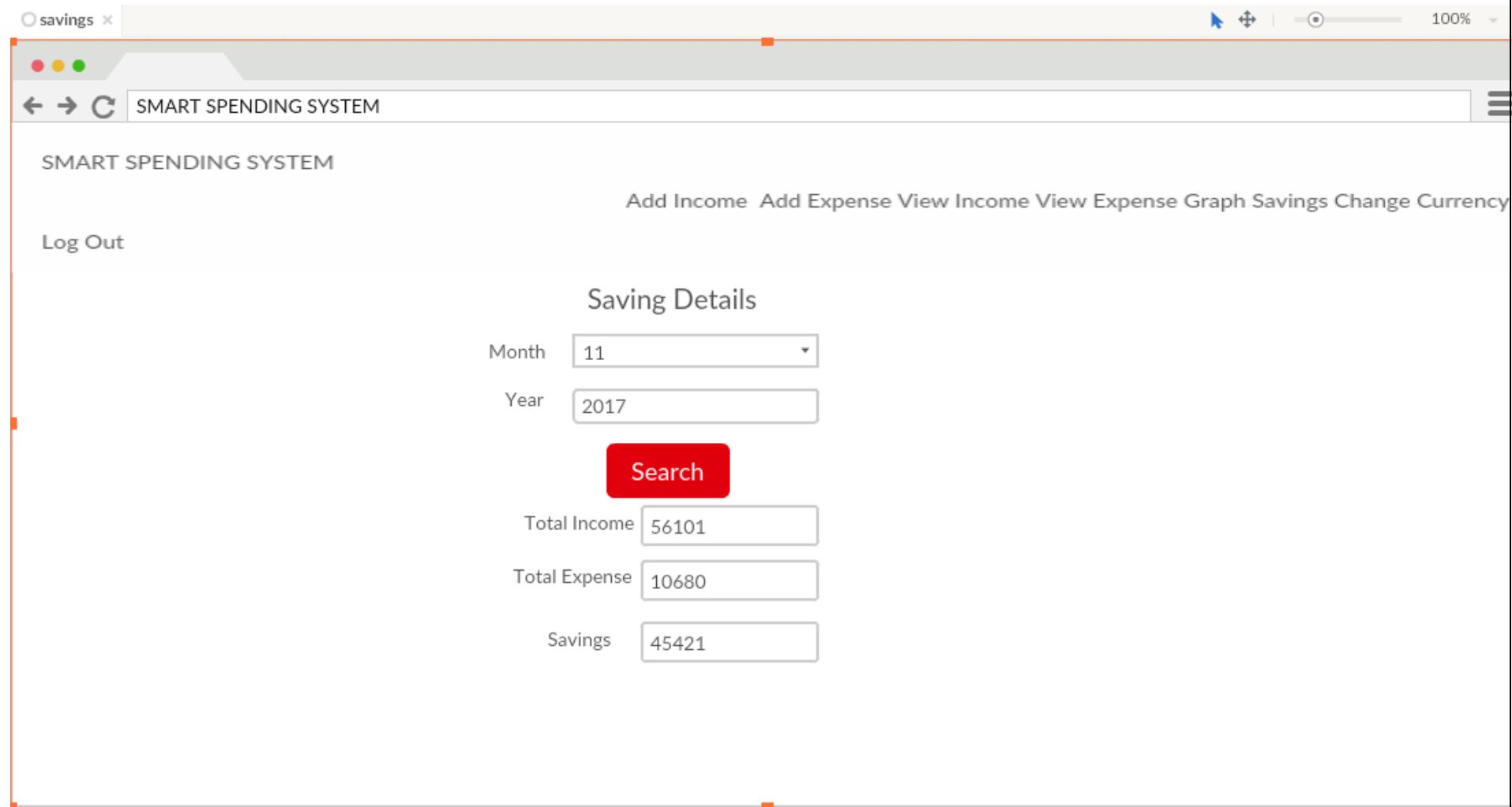
Log Out

Income - Expense Curve

Month Select Month

Year

Search

SAVINGS

The screenshot shows a web-based application titled "SMART SPENDING SYSTEM". At the top right, there are navigation links: "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", "Change Currency", and "Log Out". Below these, the main title "SMART SPENDING SYSTEM" is displayed. In the center, there is a section titled "Saving Details" with a red "Search" button. The search form includes dropdown menus for "Month" (set to 11) and "Year" (set to 2017), and input fields for "Total Income" (56101), "Total Expense" (10680), and "Savings" (45421).

CURRENCY SELECTION

The screenshot shows a web-based application titled "SMART SPENDING SYSTEM". At the top right, there are navigation links: "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", "Change Currency", and "Log Out". Below the header, the main content area is titled "Currency Change". It contains two input fields: "Country" (set to "India") and "Currency" (set to "INR"). A red "Submit" button is positioned below these fields. The background features a light gray gradient with some UI icons.

SMART SPENDING SYSTEM

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Log Out

Currency Change

Country

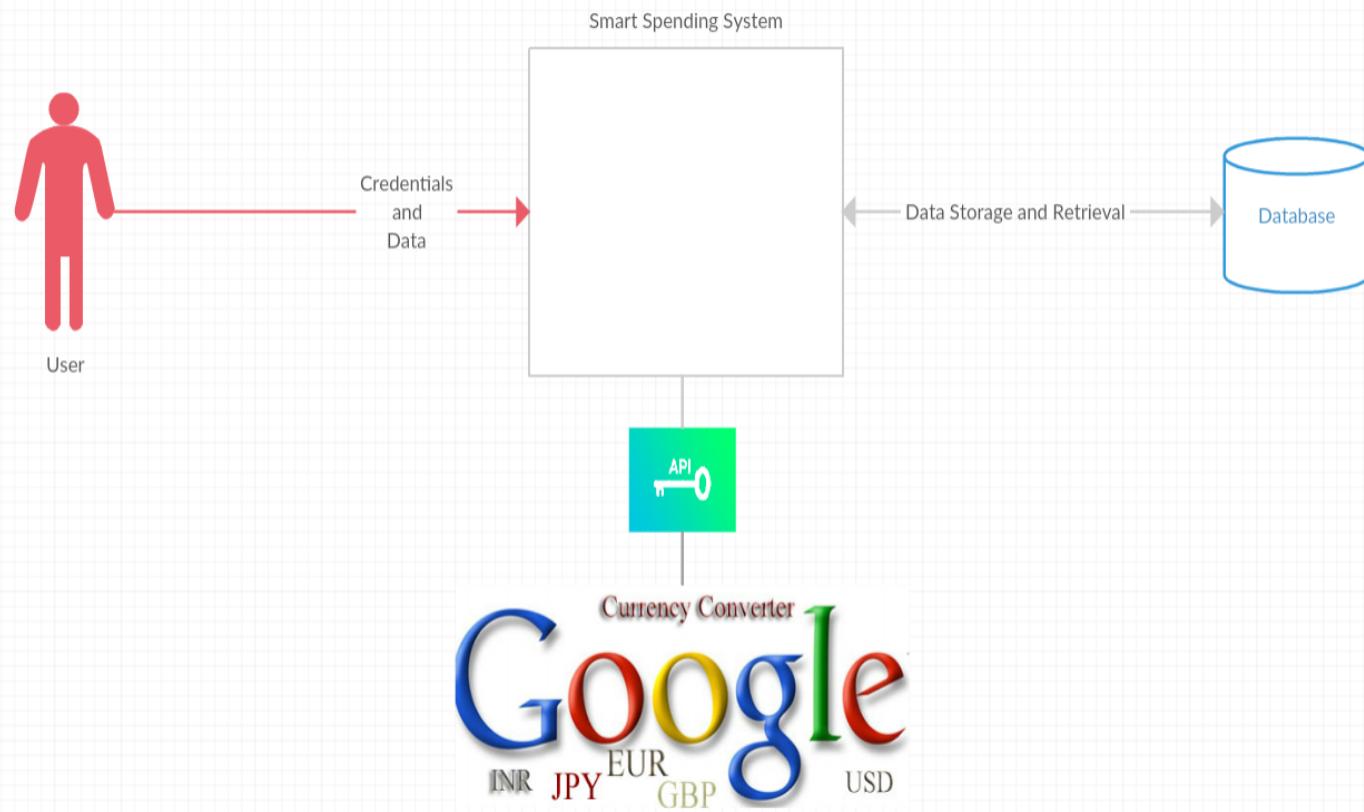
India

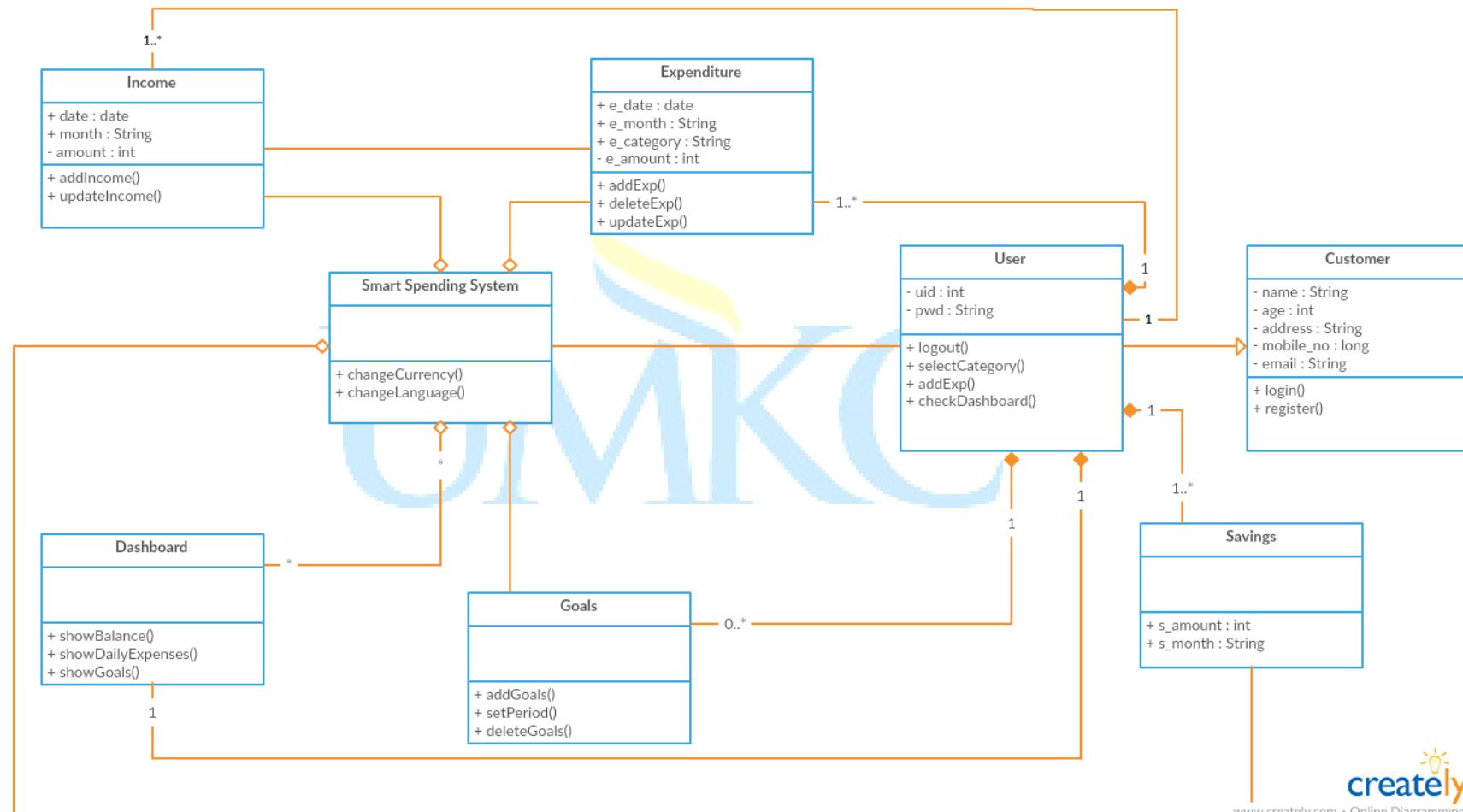
Currency

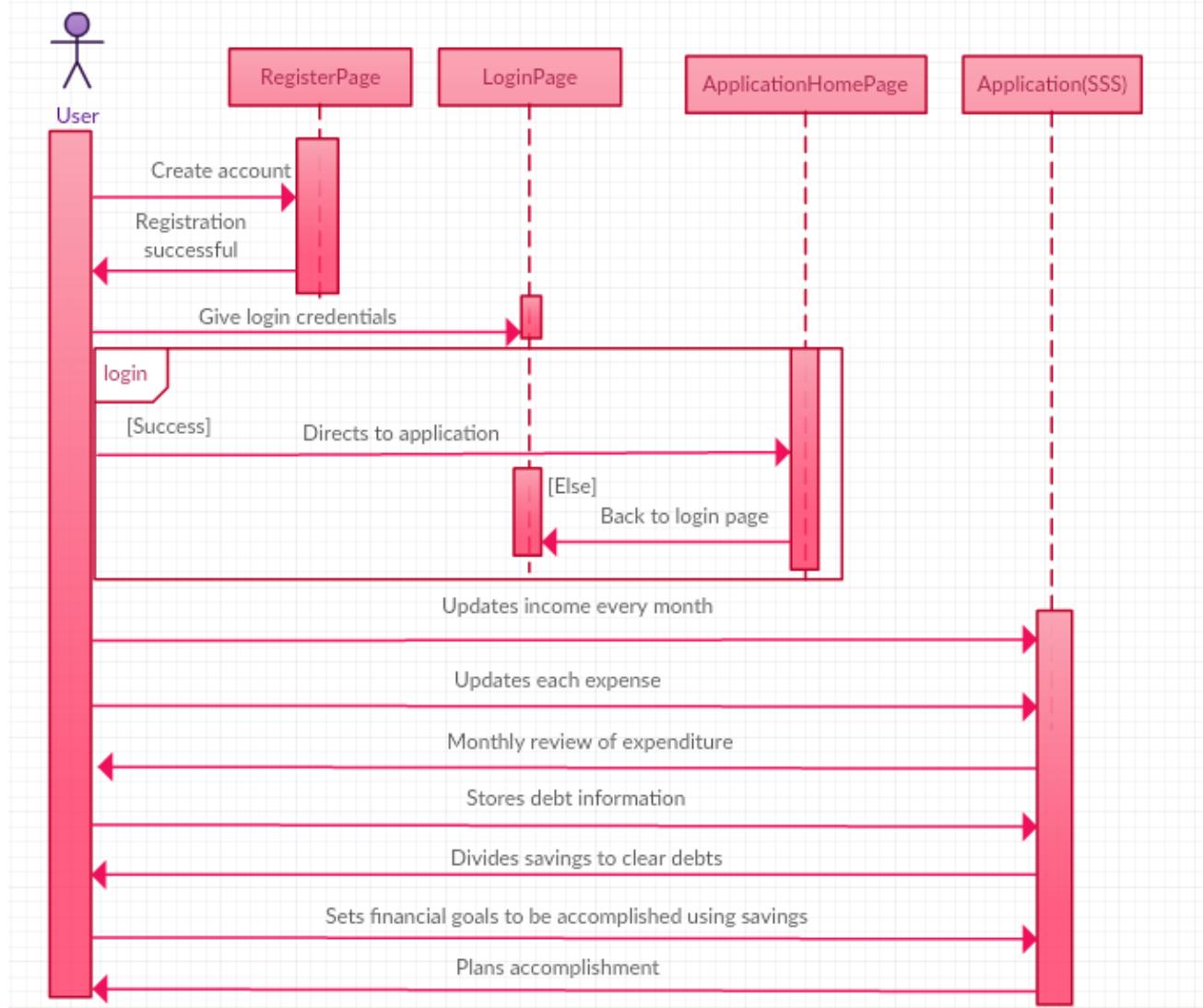
INR

Submit

ARCHITECTURE DIAGRAM

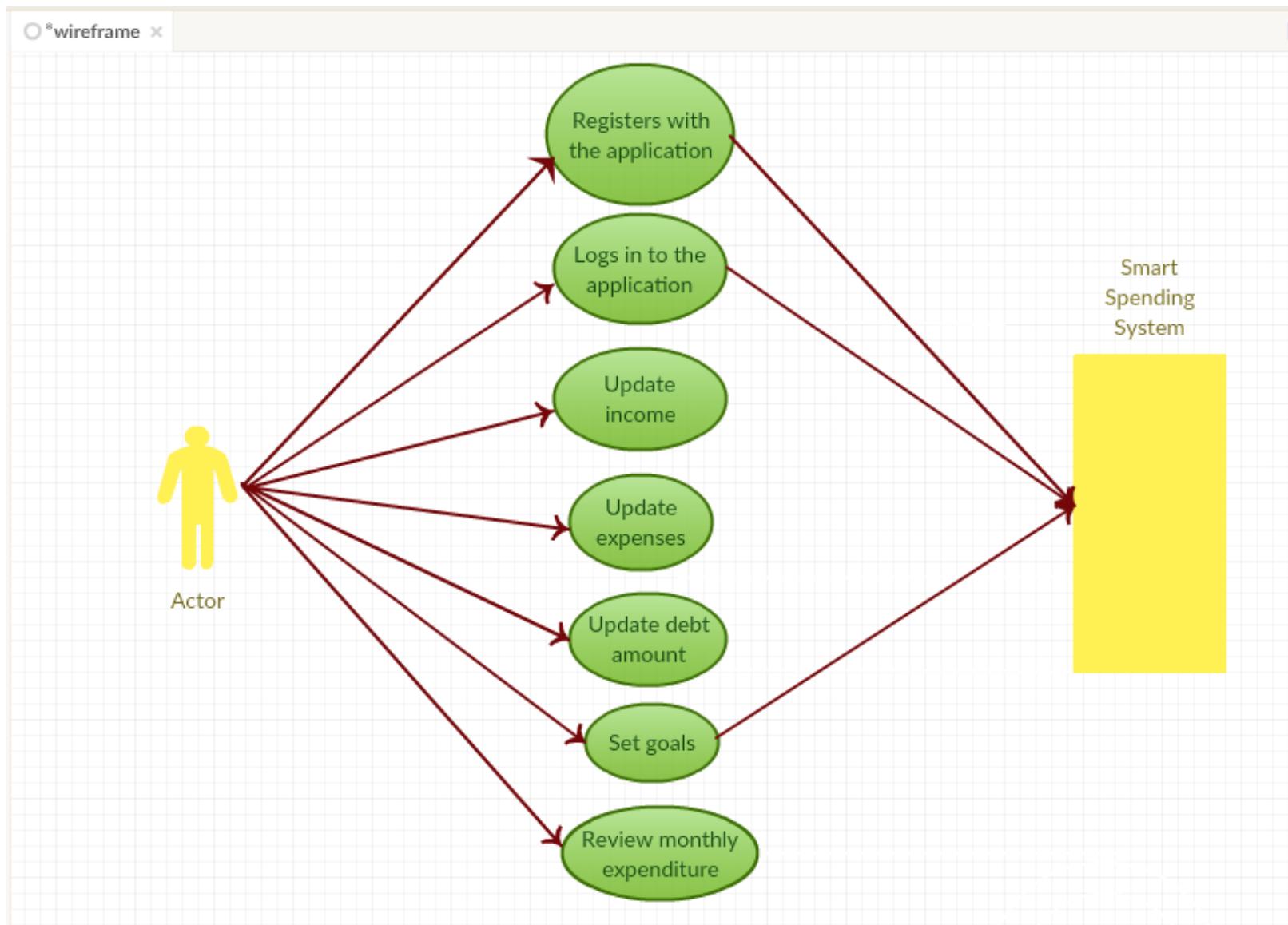


CLASS DIAGRAM

SEQUENCE DIAGRAM

USER STORIES

- ❖ As a user, I want to register with the web application, so that I can start using the Smart Spending System.
- ❖ As a user, I want to login to the application, so that I can access my account.
- ❖ As a user, I want to keep a track on my savings, so that I can achieve my goals.
- ❖ As a user, I want to keep a track on my savings, so that I can clear my debt.
- ❖ As a user, I want to review my monthly expenditure, so that I can plan my budget better for the next month.
- ❖ As a user, I want to add the income for the current month, so that I can check my income for each and every month.
- ❖ As a user, I want to add the expense for the month in a particular year, so that I can keep my expense tracking.
- ❖ As a user, I want to view my income so that I can plan my budget.
- ❖ As a user, I want to view my expenses so that I can keep a track of on my expensed.
- ❖ As a user, I want to view my balance so that I can be able to know the amount left.
- ❖ As a user, I want to view my savings of the particular month and year.
- ❖ As a user, I want to view my income VS expense curve for the selected month and year.
- ❖ As a user, I want to change the currency of the country and display the selected country currency.

USE CASE DIAGRAM

FIRST INCREMENT

IMPLEMENTATION

- Homepage
- Login
- Register

REPORT

<https://github.com/SwetchaReddy/ASE-Project/blob/master/Documentation/ProjectIncrement1.docx>

SECOND INCREMENT

IMPLEMENTATION

- Add Income
- Add Expense
- View Income
- View Expense
- Local Storage



REPORT

<https://github.com/SwetchaReddy/ASE-Project/blob/Avinash/Documentation/Increment2.docx>

THIRD INCREMENT

IMPLEMENTATION

- View Savings
- API Implementation

- Database

REPORT

<https://github.com/SwetchaReddy/ASE-Project/blob/master/Documentation/Increment%203/Increment3.docx>

FOURTH INCREMENT

IMPLEMENTATION

- Income-Expense Curve
- API Implementation

REPORT

<https://github.com/SwetchaReddy/ASE-Project/tree/Avinash/Documentation/increment%204>



PROJECT MANAGEMENT

ZENHUB

ISSUES

The screenshot shows the ZenHub interface for the repository "SwetchaReddy / ASE-Project". The top navigation bar includes links for "This repository", "Search", "Pull requests", "Issues", "Marketplace", and "Explore". On the right, there are buttons for "Watch" (2), "Star" (0), "Fork" (3), and user profile icons. Below the navigation, tabs for "Code", "Issues 0", "Pull requests 0", "Boards", "Reports", "Projects 0", "Wiki", and "Insights" are visible. A search bar contains the query "is:issue is:closed". Filter options for "Labels" and "Milestones" are present, along with a "New issue" button. A link to "Clear current search query, filters, and sorts" is available. The main area displays a list of closed issues:

Issue Type	Title	Author	Labels	Milestones
CHOOSE CURRENCY	CHOOSE CURRENCY #2	Avinash2205		Increment 3
API IMPLEMENTATION	API IMPLEMENTATION #1	Avinash2205		Increment 4
Income-Expense curve	Income-Expense curve #16	SwetchaReddy		Increment 3
Homepage Design	Homepage Design #14	SwetchaReddy	enhancement	Increment 2
Report	Report #13	SwetchaReddy		Increment 2
API Implementation	API Implementation #12	salsmaran33		Increment 2
Local Storage(Temporary)	Local Storage(Temporary) #11		duplicate	

Social Login		bug 1	#9 by Avinash2205 was closed on Oct 13		
SequenceDiagram		bug 2	#8 by SwetchaReddy was closed on Sep 19		
IncrementReport		bug 5	#7 by SwetchaReddy was closed on Sep 23		
Deployment		bug 3	#6 by SwetchaReddy was closed on Sep 22		
Implementation		bug 3	#5 by SwetchaReddy was closed on Sep 22		
UnitTesting		bug 2	#4 by SwetchaReddy was closed on Sep 21		
Wireframes		bug 2	#3 by SwetchaReddy was closed on Sep 21		
Class diagram		bug 1	#2 by SwetchaReddy was closed on Sep 19		
Wireframe		bug 1	#1 by SwetchaReddy was closed on Sep 21		

ProTip! What's not been updated in a month: [updated:<2017-11-04](#).



BOARDS

The screenshot shows a GitHub project board for the repository "SwetchaReddy / ASE-Project". The board has four columns: "Story Points", "In Progress", "Review/QA", and "Done". The "Done" column contains 18 issues with the following details:

Issue	Story Points	Description
ASE-Project #12	+3	API Implementation Increment 2
ASE-Project #16	+3	Income-Expense curve Increment 3
ASE-Project #17	+3	API IMPLEMENTATION Increment 4
ASE-Project #18	+3	CHOOSE CURRENCY Increment 3
(1)		
(2)		

The screenshot shows a GitHub repository named "SwetchaReddy / ASE-Project". The main interface includes a navigation bar with links for "Pull requests", "Issues", "Marketplace", and "Explore". Below the navigation is a search bar and a user profile icon. The main content area features a "Boards" tab selected, displaying a Kanban-style backlog with four columns: "Story Points", "In Progress", "Review/QA", and "Done". A sidebar on the right lists issues under "Closed" status, including:

- ASE-Project #13 Report (Increment 2)
- ASE-Project #9 Social Login (Increment 2)
- bug (1)
- ASE-Project #10 Database (Increment 2)
- enhancement (2)
- ASE-Project #11 Local Storage(Temporary) (Increment 2)

A green "New Issue" button is located at the top right of the board area.

The screenshot shows a GitHub repository named "SwetchaReddy / ASE-Project". The main interface includes a navigation bar with links for Pull requests, Issues, Marketplace, and Explore. Below the navigation bar, there are buttons for Watch (2), Star (0), Fork (3), and a search bar. The repository name "SwetchaReddy / ASE-Project" is displayed above a dropdown menu. The main content area features a Kanban board with four columns: Story Points, In Progress, Review/QA, and Done. The Done column contains 18+ Issues - 27 Story Points, all of which are Closed. To the right of the board is a sidebar titled "Add a Pipeline ...". The sidebar lists several items under "ASE-Project #11": Local Storage(Temporary) (Increment 2), duplicate, ASE-Project #15 (summary), ASE-Project #14 (Homepage Design, Increment 2), enhancement, and ASE-Project #7 (IncrementReport, Increment 1). A green "New Issue" button is located at the top right of the sidebar.

The screenshot shows a GitHub repository named "SwetchaReddy / ASE-Project". The main interface features a navigation bar with links for Pull requests, Issues, Marketplace, and Explore. Below the navigation bar, there are buttons for Watch (2), Star (0), Fork (3), and a search bar. The repository name "SwetchaReddy / ASE-Project" is displayed, along with a dropdown menu.

The central area displays a Kanban board with four columns:

- Story Points**: 0 Issues - 0 Story Points
- In Progress**: 0 Issues - 0 Story Points
- Review/QA**: 0 Issues - 0 Story Points
- Done**: 0 Issues - 0 Story Points

The "Done" column contains 18 issues with story points, each represented by a card:

- 18 Issues - 27 Story Points
- Closed
- 1 Increment 1
- 3
- ASE-Project #5 Implementation
- 3 Increment 1
- 3
- ASE-Project #4 UnitTesting
- 3 Increment 1
- 2
- ASE-Project #1 Wireframe
- ASE-Project #3

A sidebar on the right side of the board allows for adding a new pipeline.

BURNDOWN CHART

Increment 4

Start: **Nov 22, 2017** Change Due: **Dec 4, 2017** Change



TEAM MEMBERS

The screenshot shows the GitHub repository settings page for the repository "SwetchaReddy / ASE-Project". The left sidebar has a "Collaborators" section selected. The main area displays three collaborators: "rahulnagavalli", "Avinash2205", and "saismaran33", each with a small profile icon and a red "X" button to remove them. A "Push access to the repository" link is visible above the list. A search bar and an "Add collaborator" button are at the bottom of the list.

SwetchaReddy / ASE-Project

Watch 2 Star 0 Fork 0

Code Issues 1 Pull requests 0 Boards Reports Projects 0 Wiki Settings Insights

Options

Collaborators

Branches

Webhooks

Integrations & services

Deploy keys

Collaborators

Push access to the repository

rahulnagavalli

Avinash2205

saismaran33

Search by username, full name or email address

You'll only be able to find a GitHub user by their email address if they've chosen to list it publicly. Otherwise, use their username instead.

Add collaborator

REST APIs USED

For this application to become a global application, for this to be accessible to people all over the world, a currency API is required. The API which we use for this application is **Google Currency Converter API**.

Google provides Currency Converter API for converting currency to our desired currency. We can see the current status of our currency into other currency by going through [Google's currency converter](#) page. However, sometimes we need to implement Google currency converter functionality on our application.

There are basically 3 parameter required: From Currency, To Currency and Amount.



TESTING**UNIT TESTING:**

Test Case no.	Test Case	Description	Expected Output	Result
1.	Successful User Authentication	The user should login with username and password.	Successful Login	Pass
2.	Unsuccessful User Authentication	The user logs in with wrong username or password	Login unsuccessful with error-Invalid username or password	Pass
3.	Registration by new user	Admin accepts registration details from the user	Successful registration and transition to Login page	Pass
4.	Add Income	User can add his income for the month	Successful authentication of income is added	Pass

5.	Add Expense	User can add his expense for the month	Successful type of expense is added	Pass
6.	View Income	User can view his income.	Income is viewed for the month	Pass
7.	View Expense	User can view his expense.	Expense is viewed for the month	Pass
8.	Savings	User can view his savings based upon his income and expenses	Savings is viewed for the particular month	Pass
9.	Graph	User can view the income VS expense curve for the selected month and year.	Curve is displayed for the selected month	Pass

PERFORMANCE TESTING:

The performance test has been implemented using Yslow Analyser, it will issue the grades according to the code Quality. These has been tested for all HTML files:

HOME PAGE:

The screenshot shows a Microsoft Edge browser window with the title "Smart Spending System". The address bar displays "localhost/Daily%20Expense%20Tracker/Homepage.php". The page content is a dark-themed landing page for the "SMART SPENDING SYSTEM" with a large central heading.

An open YSlow Analyser extension overlay provides performance analysis details:

- Grade C** Overall performance score 76 Ruleset applied: YSlow(V2) URL: <http://localhost/Daily%20Expense%20Tracker/Homepage.php>
- ALL (23)** FILTER BY: [CONTENT \(6\)](#) | [COOKIE \(2\)](#) | [CSS \(6\)](#) | [IMAGES \(2\)](#) | [JAVASCRIPT \(4\)](#) | [SERVER \(6\)](#)
- D Make fewer HTTP requests**
- F Use a Content Delivery Network (CDN)**
- A Avoid empty src or href**
- F Add Expires headers**
- F Compress components with gzip**
- A Put CSS at top**
- A Put JavaScript at bottom**

The YSlow report notes:
This page has 7 external Javascript scripts. Try combining them into one.
This page has 6 external stylesheets. Try combining them into one.
Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.

At the bottom of the screen, the Windows taskbar is visible with various pinned icons and the system tray showing the date and time (6:59 PM, 12/4/2017).

REGISTRATION:

The screenshot shows a Microsoft Edge browser window. The title bar says "Smart Spending System". The address bar shows the URL "localhost/Daily%20Expense%20Tracker/register.php". Below the address bar are links for "Apps", "Bookmarks", "Google", and "Imported From IE". On the right side of the toolbar are icons for "Smaran", "New tab", "New private tab", "Stop", "Search", "Back", "Forward", "Home", and "More". The main content area displays the "Smart Spending System" logo and a large red "Registration" header. Below it, there is a text input field labeled "ID".

chrome-extension://ninejjcohidippngpapihnmgllmakh/yslow.html#201

Home Grade Components Statistics Rulesets YSlow(V2) Edit Help

Grade **B** Overall performance score 80 Ruleset applied: YSlow(V2) URL: http://localhost/Daily%20Expense%20Tracker/register.php

ALL (23) FILTER BY: CONTENT (6) | COOKIE (2) | CSS (6) | IMAGES (2) | JAVASCRIPT (4) | SERVER (6) [Tweet](#) [Share](#)

B Make fewer HTTP requests

F Use a Content Delivery Network (CDN)

A Avoid empty src or href

F Add Expires headers

F Compress components with gzip

A Put CSS at top

A Put JavaScript at bottom

Grade B on Make fewer HTTP requests

This page has 6 external stylesheets. Try combining them into one.

Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.

[»Read More](#)

Windows Start Type here to search e File Mail Chrome Word PowerPoint Speed Dial Paint 7:01 PM 12/4/2017

ADD INCOME

The screenshot shows a Microsoft Edge browser window. The title bar reads "Smart Spending System". The address bar shows the URL "localhost/Daily%20Expense%20Tracker/addincome.php". The page content is titled "Add Income". A navigation menu at the top includes "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", and "Change Currency". Below the menu is a "Logout" link. The main content area has a dark background with the title "Add Income" in white. A "Transaction Id" input field is present. The bottom half of the screen displays a YSlow performance analysis report for the URL "http://localhost/Daily%20Expense%20Tracker/addincome.php". The report is graded "Grade A" with an overall performance score of 95. It lists 23 components and provides optimization tips. The tips include:

- A Make fewer HTTP requests
- D Use a Content Delivery Network (CDN)
- A Avoid empty src or href
- C Add Expires headers
- B Compress components with gzip
- A Put CSS at top

The report also includes a section titled "Grade A on Make fewer HTTP requests" with a description of how reducing components can improve page load times.

At the bottom of the browser window, the taskbar shows various pinned icons and the system clock indicating "7:04 PM 12/4/2017".

ADD EXPENSE

The screenshot shows a Microsoft Edge browser window with the following details:

- Title Bar:** Smart Spending System
- Address Bar:** localhost/Daily%20Expense%20Tracker/addexpense.php
- Toolbar:** Apps, Bookmarks, Google, Imported From IE, Other bookmarks
- Header:** Smart Spending System, Add Income, Add Expense, View Income, View Expense, Graph, Savings, Change Currency, Logout
- Main Content:** Add Expense
- YSlow Report:**
 - Grade:** A (Overall performance score 95)
 - Ruleset applied:** YSlow(V2)
 - URL:** http://localhost/Daily%20Expense%20Tracker/addexpense.php
 - Components:** ALL (23) | FILTER BY: CONTENT (6) | COOKIE (2) | CSS (6) | IMAGES (2) | JAVASCRIPT (4) | SERVER (6)
 - Grade A on Make fewer HTTP requests:** Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.
 - Actions:** Tweet, Share
- Taskbar:** Windows Start button, Search bar (Type here to search), Task View, Edge, File Explorer, Mail (6), Chrome, PDF, Word, PowerPoint, Paint, Speed Test, File Explorer, Task View, Search icon, Volume icon, Network icon, Battery icon, 7:04 PM, 12/4/2017, Notifications (6)

VIEW INCOME

The screenshot shows a Microsoft Edge browser window. The title bar reads "Smart Spending System". The address bar shows the URL "localhost/Daily%20Expense%20Tracker/viewincome.php". The page content is the "Smart Spending System" application, which includes a navigation menu with links like "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", and "Change Currency". Below the menu is a "Logout" link. A dropdown menu labeled "Month" is open, showing the option "--Select Month--".

Below the main application, there is an overlay window titled "chrome-extension://ninejjcohidippngpapiilnmkgllmakh/yslow.html#201". This is a YSlow performance report. It shows a grade of "Grade A" with an overall performance score of 95. The report was generated using the "YSlow(V2)" ruleset and applied to the URL "http://localhost/Daily%20Expense%20Tracker/viewincome.php".

The report lists 23 components, filtered by Content (6), Cookie (2), CSS (6), Images (2), JavaScript (4), and Server (6). The report highlights several optimization opportunities:

- A Make fewer HTTP requests
- D Use a Content Delivery Network (CDN)
- A Avoid empty src or href
- C Add Expires headers
- B Compress components with gzip
- A Put CSS at top

The report also provides a detailed explanation for the "Make fewer HTTP requests" recommendation:

Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.

At the bottom of the screen, the Windows taskbar is visible, showing icons for File Explorer, Mail, Google Chrome, Word, and Powerpoint. The system tray shows the date and time as "7:05 PM 12/4/2017".

VIEW EXPENSE

The screenshot shows a Microsoft Edge browser window. The title bar reads "Smart Spending System". The address bar shows the URL "localhost/Daily%20Expense%20Tracker/viewexpense.php". The page content is the "Smart Spending System" interface, featuring a navigation menu with links like "Add Income", "Add Expense", "View Income", "View Expense", "Graph", "Savings", and "Change Currency". Below the menu, there are dropdown fields for "Month" (set to "--Select Month--") and "Year" (empty). A "Logout" link is visible on the left.

Below the main content, a YSlow performance report is displayed. The grade is "Grade A" with an overall score of 95. The URL is "http://localhost/Daily%20Expense%20Tracker/viewexpense.php". The report lists 23 components, filtered by Content (6), Cookie (2), CSS (6), Images (2), JavaScript (4), and Server (6). The report highlights several optimization opportunities:

- A Make fewer HTTP requests**
- D Use a Content Delivery Network (CDN)**
- A Avoid empty src or href**
- C Add Expires headers**
- B Compress components with gzip**
- A Put CSS at top**

The report explains that reducing the number of components can lead to faster page loads and provides links to further reading.

The taskbar at the bottom of the screen shows various pinned icons, including File Explorer, Mail, Google Chrome, Word, and Powerpoint. The system tray indicates the date and time as 12/4/2017, 7:05 PM.

GRAPH (INCOME EXPENSE CURVE)

The screenshot shows a web browser window with the following details:

- Title Bar:** Smart Spending System
- Address Bar:** localhost/Daily%20Expense%20Tracker/graph.php
- Toolbar:** Apps, Bookmarks, Google, Imported From IE, Other bookmarks
- Header:** Smart Spending System, Add Income, Add Expense, View Income, View Expense, Graph, Savings, Change Currency, Logout
- Main Content:** Income-Expense Curve. A dropdown menu labeled "Month" is set to "--Select Month--".
- Bottom Content:** A YSlow analysis report with a grade of Grade A. It includes a sidebar with performance tips and a main panel with detailed analysis.
- Taskbar:** Shows various pinned icons including File Explorer, Edge, Mail, Chrome, Word, and Powerpoint.
- System Tray:** Shows the date and time as 7:06 PM, 12/4/2017, and a notification icon with a '6'.

SAVINGS

The screenshot shows a web browser window with the following details:

- Address Bar:** localhost/Daily%20Expense%20Tracker/viewbalance.php
- Toolbar:** Apps, Bookmarks, Google, Imported From IE, Other bookmarks.
- Header:** Smart Spending System, Add Income, Add Expense, View Income, View Expense, Graph, Savings, Change Currency, Logout.
- Main Content:** Saving Details. A dropdown menu labeled "Month" is set to "--Select Month--".
- Performance Report (YSlow):**
 - Grade:** Grade A
 - Overall performance score:** 95
 - Ruleset applied:** YSlow(V2)
 - URL:** http://localhost/Daily%20Expense%20Tracker/viewbalance.php
 - Components:** ALL (23) | FILTER BY: CONTENT (6) | COOKIE (2) | CSS (6) | IMAGES (2) | JAVASCRIPT (4) | SERVER (6)
 - Actions:** Tweet | Share
 - Grade A on Make fewer HTTP requests:** This section lists recommendations:
 - A Make fewer HTTP requests
 - D Use a Content Delivery Network (CDN)
 - A Avoid empty src or href
 - C Add Expires headers
 - B Compress components with gzip
 - A Put CSS at top
 - A Put JavaScript at bottom
 - Description:** Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.
 - Read More:** A link to further information.

CURRENCY CHANGE

Smart Spending System

Add Income Add Expense View Income View Expense Graph Savings Change Currency

Logout

Currency Change

Country

chrome-extension://ninejjcohidippngpapiiinmkglmakh/yslow.html#201

Home Grade Components Statistics Rulesets YSlow(V2) Edit Help

Grade A Overall performance score 95 Ruleset applied: YSlow(V2) URL: <http://localhost/Daily%20Expense%20Tracker/graph.php>

ALL (23) FILTER BY: [CONTENT \(6\)](#) | [COOKIE \(2\)](#) | [CSS \(6\)](#) | [IMAGES \(2\)](#) | [JAVASCRIPT \(4\)](#) | [SERVER \(6\)](#)

[Tweet](#) [Share](#)

A Make fewer HTTP requests

D Use a Content Delivery Network (CDN)

A Avoid empty src or href

C Add Expires headers

B Compress components with gzip

A Put CSS at top

A Put JavaScript at bottom

Grade A on Make fewer HTTP requests

Decreasing the number of components on a page reduces the number of HTTP requests required to render the page, resulting in faster page loads. Some ways to reduce the number of components include: combine files, combine multiple scripts into one script, combine multiple CSS files into one style sheet, and use CSS Sprites and image maps.

[»Read More](#)

Type here to search

7:07 PM
12/4/2017

STATUS REPORT

Work completed

Description

- Created issues for each increment in GitHub.
- Created wireframes.
- Designed pages of Application
 - Login
 - Register
 - Application page
 - ❖ Add Income
 - ❖ Add Expense
 - ❖ View Income
 - ❖ View Expense
 - ❖ Savings
 - ❖ View Income-Expense Curve
 - ❖ Currency Change
- Implementation of the pages of the application.



Responsibility

Task	Person
✓ Ground work for project	All four in the team
✓ Issues	Swetcha, Avinash
✓ Wireframes and Pages Design	
▪ Home, Add Expense and View Income	Swetcha Reddy Vangala
▪ Income-Expense Curve, View Expense	Avinash Banala
▪ Register, Currency Selection	Sai Smaran Chinthalal
▪ Login, Add Income, Savings	Rahul Nagavalli
✓ Documentation	Avinash, Swetcha
✓ Local Storage	Swetcha

Time taken = 90 days



Contribution

Swetcha Reddy Vangala – 25%
Avinash Banala – 25%
Sai Smaran Chinthalal – 25%
Rahul Nagavalli – 25%

Responsibility

We developed the application together.

Issues/Concerns – No issues.



ACKNOWLEDGEMENT

We are pleased to present “**SMART SPENDING SYSTEM**” project and take this opportunity to express our profound gratitude to all those people who helped us in completion of this project. We are very much thankful to our professor **Dr. Yugyung Lee** for her time and effort in guiding through our project. We would like to thank her for support, patience and faith in our capabilities and for giving us flexibility in terms of working and reporting schedules. We extend our heartfelt thanks to our guide, **Ms. Sidrah Junaid**, for her enthusiastic guidance throughout the course of our project. We express our deepest gratitude towards our other TA’S for their valuable and timely advice during the various phases in our project



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