Socially Responsible Investing (SRI)

Presentation 4

Instructor: Professor Henry Wong

Team(1) - 6 Underground
Members Presenting:

Farhan Pasha Mohammed - U01819625
Samarth Yadav - U01815170
Harshal Patil - U01825722
Kush Shah - U01788010
Jephthe Louis-Jacques - U00563103
Naga Sai Kiran Nimmakayala- U01823114

Problem Statement & Solution

Problem

Millennials and Gen Z are conscious about their financial position when it comes to supporting companies that deemed unethical in different sectors. As of now, there is no free website that provides information about public traded companies stock price and overall 'Socially Responsible' rating combined.

Solution

We are providing a free tool to review current companies stock price in comparison to the respective company's overall Socially Responsible' ratings.

This free tool will provide the social responsibility rating of the company along with most recent available articles written about the company as part of diligence when researching. The site will also partner with third platforms to allow SCIs to create a account and beginning investing in the company of their choice.

Technology Stack

- Project Management: JIRA
- IDE: Visual Studio Code
- Technology: Python
- Backend: Django
- Front End: HTML , CSS, Bootstrap
- APIs: Yfinance
- White Boarding : Miro

yfinance 0.1.70

Persona : End User Persona

Donna, a 24 years old, recent college graduate sees the value of investing her hard earned money but she is new to the space. Donna is very conscious when it comes to investing in companies that are known for conducting unethical practices.

With a low risk tolerance for unethical companies, she is looking for a reliable platform which will give her enough insight to make good investments as a socially conscious investor with no strings attached.

Persona : Influencer Persona

carlos, 60 years old is a famous wealthy long term investors that does public speaking from time to time and encourages his audience to do more diligence about the companies they are investing in.

During speaking engagements, he often suggests easy tools that can help new investors get more insight about conscious investing. Michael often suggests SRI Website to his audience as a great opens source free tool. He also uses SRI for quick research as well.

Persona : Anti-persona

Bob, 30 years old is a hardcore capitalist that doesn't believe companies should be monitored based on ethics.

He believes companies that drive value to the bottom line are the ultimate indicator for investing; regardless if the company doesn't have the best public opinion.

User Story and Acceptance Criteria

User Story 1

- As a end user Donna clicks in the search bar, to enter a company name to see latest stock price, ESG data , Historical data and other financial features of the company.

Acceptance Criteria

- Any relevant company name into search to return latest stock price, ESG data , Historical data and other financial features.
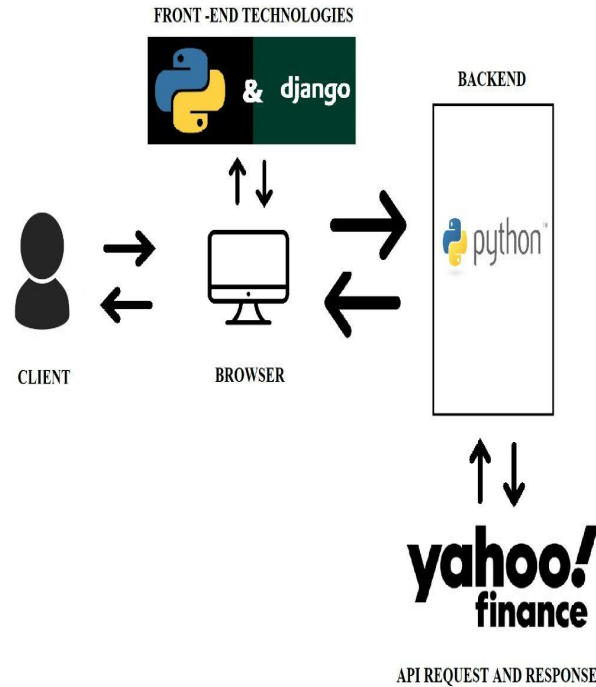
User Story 2

- As a end user Donna clicks on invest in company to launch browser to make investment on other site.

Acceptance Criteria

- Clicking on button will open up browser to third party financial platform for end user to purchase stock

SYSTEM ARCHITECTURE

MVP
(Minimum Viable Product)

- User can enter company name in search bar, Search bar detects and gives automatic recommendation of a company name before entering full details
- Once the company name is entered user should be able to click submit button , Resulted ESG Data is displayed in Tabular forms
- Environmental score of a particular company will be displayed individually apart from ESG total rating, Company's information is displayed and it shows along with the environmental score
- Environmental, social and governance total ESG score to determine corporate sustainability , Resulted ESG Data is displayed in Tabular forms
- Historical data of a company is also available in SRI website, Data is returned in Tabular form, weekly data upto 12 months is available

Test cases

| Test Case ID	Scenario	Test Cases	Expected Result	Pass/Fail	Test Data
1	Search Bar	User can enter company name in search bar	Search bar detects and gives automatic recommendation of a company name before entering full details	Pass	Company name is inputted in search bar
2	Submit Button	Once the company name is entered user should click submit button	company financial data along with ESG will be displayed on SRI website	Pass	Resulted ESG Data is displayed in Tabular forms
3	Environmental Score	Environmental score of a particular company will be displayed individually apart from ESG total rating	Company's information is displayed and it shows along with the environmental score	Pass	User can able to see the environmental score indvidually apart from ESG total rating
4	Social Score	Social score of a particular company will be displayed indvidually apart from ESG total rating	Company's information is displayed and it shows along with the social score	Pass	User can able to see the socail score indvidually apart from ESG total rating
5	Governance Score	Governance score of a particular company will be displayed individually apart from ESG total rating	Company's information is displayed and it shows along with the governance score	Pass	User can able to see the governance score indvidually apart from ESG total rating
6	Total ESG Score	Environmental, social and governance total ESG score to determine corporate sustanability	Total ESG score of a particular company	Pass	ESG score will be displayed in the SRI homepage
7	Stock Price	User enters company name in search bar and click submit button, stock price is also returned	Latest stock price is updated in SRI website	Pass	Stock price is returned along with all financial details of entered company
8	Historical Data	Historical data of a company is pulled	12 months historical data is pulled in SRI website about a particular company	Pass	Data is returned in Tabular form, weekly data upto 12 months is available
9	Invest in this company	User wants to invest in a particular company then SRI website will redirect user to the third party website	Invest in this company button is not functional user should enter third party services manually	Fail	Invest in this company will return nothing for now

Sprint 1

Sprint	Description	Priority	Status	Goal date	MileStone
Sprint 1	Describe project & Output Goals	Highest Priority	Complete	1/30/22	Deliverable 1 - Presentation Deck
Sprint 1	Write how features will be used on the site	Highest Priority	Complete	1/30/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to create personas	Highest Priority	Complete	1/30/22	Deliverable 1 - Presentation Deck
Sprint 1	Weekly stand up meetings (Retrospective) 1	High Priority	Complete	1/30/22	Deliverable 1 - Presentation Deck
Sprint 1	List key traits of a large segment of your audience	Medium Priority	Complete	2/6/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to create Github Account	Medium Priority	Complete	2/6/22	Deliverable 1 - Presentation Deck
Sprint 1	Weekly stand up meetings (Retrospective) 2	Medium Priority	Incomplete	2/6/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to share Github link with group and login/password	Medium Priority	Complete	2/6/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to add wiki description for Github Account	Medium Priority	Complete	2/13/22	Deliverable 1 - Presentation Deck
Sprint 1	Add individual student photos and profile to Github acct	Medium Priority	Complete	2/13/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to create JIRA	High Priority	Complete	2/13/22	Deliverable 1 - Presentation Deck
Sprint 1	Weekly stand up meeting (retrospective) 3	High Priority	Complete	2/13/22	Deliverable 1 - Presentation Deck
Sprint 1	Need to write detail customer journey for UI/UX	High Priority	Incomplete	2/17/22	Deliverable 1 - Presentation Deck
Sprint 1	Peer Review 1	High Priority	Complete	2/17/22	Deliverable 1 - Presentation Deck
Sprint 1	Deliverable 1: prepare Presentation Deck	High Priority	Complete	2/17/22	Deliverable 1 - Presentation Deck

Sprint 1: BurnDown Chart (1/30 - 2/17/22)
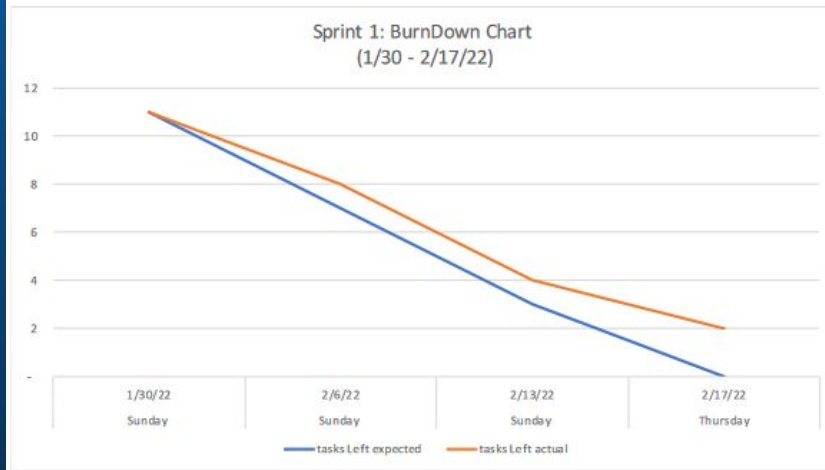
Total tasks in Scope		15	15
timeline		tasks Left	
date	day	expected	actual
Sunday	1/30/22	11	11
Sunday	2/6/22	7	8
Sunday	2/13/22	3	4
Thursday	2/17/22	-	2

Out of 15 tasks in scope for Sprint 1, 13 were fully completed. The remaining two were moved to Sprint 2

Sprint 2

| Sprint	Description	Priority	Status	Goal date	MileStone
Sprint 2	Select API for stock prices and companies	Highest Priority	Complete	2/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to determine tech stack	Highest Priority	Complete	2/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to wrtie detail customer journey fro UI/UX	High Priority	Complete	2/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Weekly stand meetings (retropestive) 4	High Priority	Incomplete	2/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to research available resources (Front End / Back End)	High Priority	Complete	2/27/22	Deliverable 2 - Presentation Deck
Sprint 2	Review API for SRI list of companies Rating	High Priority	Complete	2/27/22	Deliverable 2 - Presentation Deck
Sprint 2	Find mechanism for generating Google Article feed	Low Priority	Incomplete	2/27/22	Deliverable 2 - Presentation Deck
Sprint 2	Weekly stand meetings (retropestive) 5	High Priority	Incomplete	2/27/22	Deliverable 2 - Presentation Deck
Sprint 2	Research what AI tools can be leveraged for optimization	Low Priority	Incomplete	3/6/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to purchase a website domain (TBD)	Low Priority	Incomplete	3/6/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to determine backend requirements	Medium priority	Complete	3/6/22	Deliverable 2 - Presentation Deck
Sprint 2	Weekly stand meetings (retropestive) 5	High Priority	Complete	3/6/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to create a data schema	Medium priority	Incomplete	3/13/22	Deliverable 2 - Presentation Deck
Sprint 2	Write pseudo code ofsite functionality	High Priority	Complete	3/13/22	Deliverable 2 - Presentation Deck
Sprint 2	Weekly stand meetings (retropestive) 6	High Priority	Complete	3/13/22	Deliverable 2 - Presentation Deck
Sprint 2	Need to create website UI/UX	High Priority	Incomplete	3/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Writing functionality source code	High Priority	Incomplete	3/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Update GitHub and push sourcecode	High Priority	Incomplete	3/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Peer Review 2	High Priority	Complete	3/20/22	Deliverable 2 - Presentation Deck
Sprint 2	Deliverable 2: Prepare Presentation Deck	Highest Priority	Complete	3/24/22	Deliverable 2 - Presentation Deck

Sprint 2: BurnDown Chart
(2/18 - 3/24/22)

legend: tasks Left expected, tasks Left actual
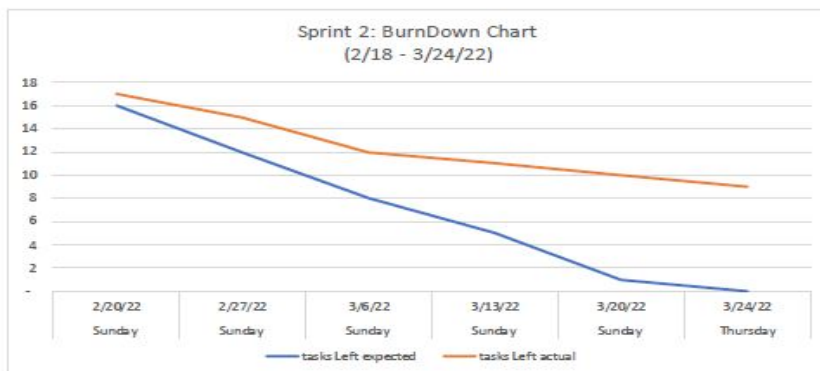
Total tasks in Scope		20	20

timeline		tasks Left	
date	day	expected	actual
Sunday	2/20/22	16	17
Sunday	2/27/22	12	15
Sunday	3/6/22	8	12
Sunday	3/13/22	5	11
Sunday	3/20/22	1	10
Thursday	3/24/22	-	9

Out of 20 tasks in scope for Sprint 2, 11 were fully completed. The remaining 9 were assessed and moved to Sprint 3 and other low priority items were moved to backlog instead of sprint 3

Sprint 3

| Sprint	Description	Priority	Status	Goal date	MileStone
Sprint 3	Need to create website UI/UX	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Writing functionality source code	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Update GitHub and push sourcecode	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Modify UI/UX based on final API for calling fetching data available to Website	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Update GitHub and push sourcecode	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Weekly Stand up meeting (Retrospective) 6	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Writing functionality source code	High Priority	Complete	3/25/22	Deliverable 3 - Technical Paper
Sprint 3	Integrate UI/UX into source code and test	High Priority	Complete	4/1/22	Deliverable 3 - Technical Paper
Sprint 3	Weekly Stand up meeting s (Retrospective) 7	High Priority	Complete	4/1/22	Deliverable 3 - Technical Paper
Sprint 3	Peer Review 3	High Priority	Complete	4/1/22	Deliverable 3 - Technical Paper
Sprint 3	Implement APIs	High Priority	Complete	4/1/22	Deliverable 3 - Technical Paper
Sprint 3	Integrate UI/UX into source code	High Priority	Complete	4/1/22	Deliverable 3 - Technical Paper
Sprint 3	Deliverable 3: Technical Paper	High Priority	Complete	4/7/22	Deliverable 3 - Technical Paper

Sprint 3: BurnDown Chart (3/25 - 4/7/22)

tasks Left expected — tasks Left actual
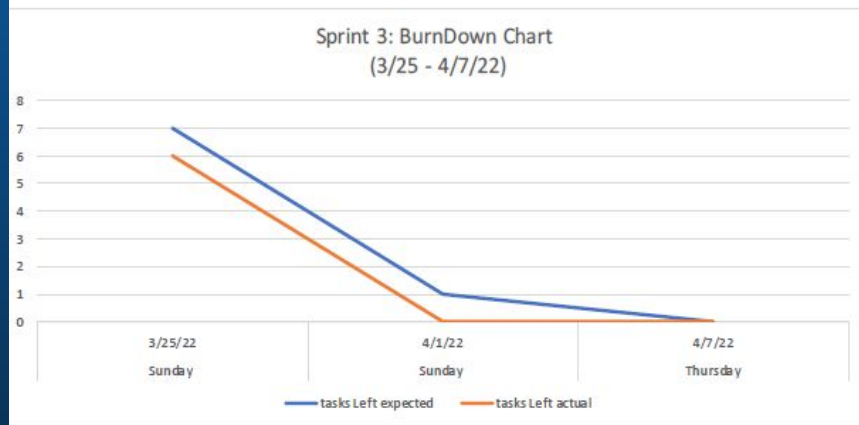
Total tasks in Scope		13	13
timeline		tasks Left	
date	day	expected	actual
Sunday	3/25/22	7	6
Sunday	4/1/22	1	0
Thursday	4/7/22	-	0

Out of 13 tasks in scope for Sprint 3, team was able to fully complete all 13 ahead of schedule. The team used the extra time to begin testing features ahead of schedule but not reflected in this Sprint.

Sprint 4

Sprint	Description	Priority	Status	Goal date	MileStone
Sprint 4	Testing each feature against user journey	High Priority	Complete	4/10/22	Deliverable 4 - Presentation Deck
Sprint 4	Create test cases	High Priority	Complete	4/10/22	Deliverable 4 - Presentation Deck
Sprint 4	Weekly stand up meetings (Retrospective) 8	High Priority	Complete	4/10/22	Deliverable 4 - Presentation Deck
Sprint 4	add and test error handling for search form	High Priority	Complete	4/17/22	Deliverable 4 - Presentation Deck
Sprint 4	test page visuals on different screen sizes and document where UI needs to be more responsive	High Priority	Complete	4/17/22	Deliverable 4 - Presentation Deck
Sprint 4	run performance tests to see page load times. Then see where performance enhancement can be added for better page load	High Priority	Complete	4/17/22	Deliverable 4 - Presentation Deck
Sprint 4	Weekly stand up meetings (Retrospective) 9	High Priority	Complete	4/17/22	Deliverable 4 - Presentation Deck
Sprint 4	Revise presentation slides from Deliverable 1 - 2	High Priority	Complete	4/24/22	Deliverable 4 - Presentation Deck
Sprint 4	Make change to technical Paper	High Priority	Complete	4/24/22	Deliverable 4 - Presentation Deck
Sprint 4	Update user personas to reflect professor notes	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Update Product Roadmap for Fall'22 based on current Sprint completions	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Complete Final Report	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	User Manual	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Installation Manual	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Update Github Wiki	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Final Report	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Peer Review 4	High Priority	Complete	5/1/22	Deliverable 4 - Presentation Deck
Sprint 4	Deliverable 4: Present MVP - Live Demo	High Priority	Complete	5/5/22	Deliverable 4 - Presentation Deck

Sprint 4: BurnDown Chart (4/8 - 5/5/22)
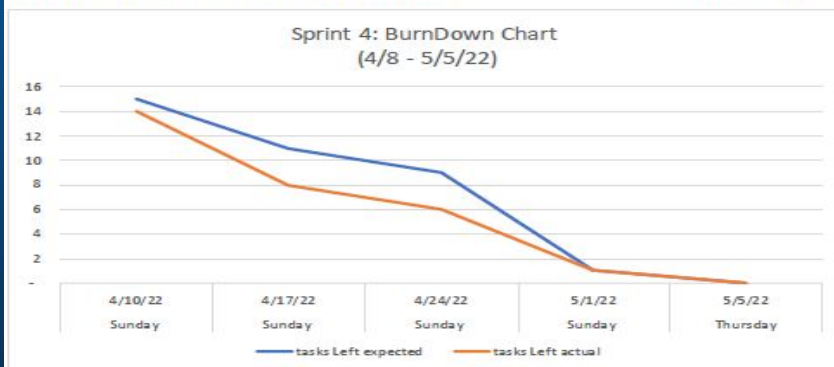
Total tasks in Scope		18	18
timeline		tasks Left	
date	day	expected	actual
Sunday	4/10/22	15	14
Sunday	4/17/22	11	8
Sunday	4/24/22	9	6
Sunday	5/1/22	1	1
Thursday	5/5/22	-	0

Out of 18 tasks in scope for Sprint 4, the team was able to fully complete all 18 on schedule. The was no extra time available was enough to begin new work that was out of scope for this semester.

Product Backlog

Type	Description	Priority	Status	Sprint
API	Find mechanism for generating Google Article feed	High Priority	Incomplete	Fall'22
Feature	Link button for 'invest now' to 3rd party website	High Priority	Incomplete	Fall'22
Feature	Create user Login and password UI/UX	High Priority	Incomplete	Fall'22
Feature	Create new UI to factor in login, password reset and settings	High Priority	Incomplete	Fall'22
Backend	Select Cloud platform to host user data	High Priority	Incomplete	Fall'22
Backend	Need to create a data schema	Medium Priority	Incomplete	Fall'22
Backend	Research what AI tools can be leveraged for optimization	Low Priority	Incomplete	Fall'22
FrontEnd	Review Spring'22 UI design for front end and make modifications where applicable	Low Priority	Incomplete	Fall'22

Retrospective: Deliverables 4

What went well

The required modification and changes were made by agreement of all team members

Collaboration between team members regarding assigned work, task completion and availability improved

Each task was discussed with team before starting to avoid rework

What needs improvement?

the integration of individual work in project needs to improve

making changes to styling details for deliverable

Updating Github on timely basis along with updated documents

Next steps

Discussing and brainstorming to add extra features if any

looking out to purchase reliable and cost efficient website domain

FUTURE WORK

- Financial data which is displayed in tabular form should be converted into graphs and different user preferred visualizations.
- Compare two different companies parallely, within SRI website.
- front end of SRI website has to be updated, more css styles, user friendly and search engine optimization
- User login page should be created, so that user preferences are stored and user can access it later.
- Generating google news articles relating to stock company entered within the application

THANK YOU!