# FICS: Fixed Income for College Students



Anling Chen, Sowjanya Sritharasarma, Muhammad Tanveer, Fatima Javid CSCI 499 12/18/2023

#### **Table of Contents**

- → FICS team
- What is FICS?
- → Demo
- Product definition
- Design
- Software packages and technologies used
- Testing
- Ethical concerns
- Work distribution
- Challenges and lessons



#### What is FICS?

FICS is an interactive Android app that functions as an investment simulation platform for the fixed income market.





# Demo



## **Product definition**













**Problem** 

Gap in educational resources regarding the fixed income market

**Target Audience** 

Young adults

Vision

Broaden financial literacy

**Strategy** 

Investment simulator with step-by-step tutorial Goals

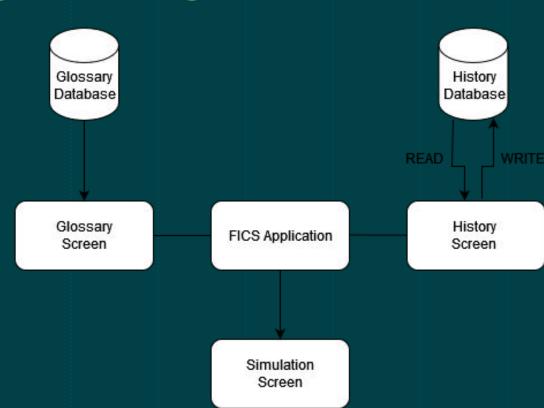
Allow users to develop their own investment portfolio plan

4

8

# Architectural design Glossaery Portfolio Introduction Tutorial Simulation History Database 4 Interest rates found History through BS4 web scraping

# **System Design**



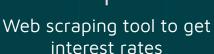


# **Software Packages and Technologies**

Android Studio IDE Mobile

App

Beautiful Soup4



Simulation keeps track of user's investments and portfolio and displays it in the History page

Database



Jetpack Compose



## **Ethical Concerns**

Investment App with "fake money"



**Reckless with REAL money** 

App cybersecurity

Does not cover whole gamut of fixed income investing

#### **Work Distribution**

#### Anling

Finance knowledge

Web scraping

Figma UI Design

#### Sowjanya

Backend - snack bars, dialogue boxes, glossary search, default risk, help button, etc

#### Fatima

UI/UX design and implementation

#### Muhammad

Backend - history page, portfolio performance page, navigation buttons, etc



## **Challenges & Lessons**



Challenge

Finding
APIs/Implementing
Web-Scraped Data

We could not find appropriate APIs for our purpose, so Anling learned BeautifulSoup4 to get interest rates from web scraped data UI Overhaul

Initial UI was not up to standard, group had to redesign and implement UI Lesson

Work harder AND smarter!

We learned to be more efficient with our time and allow time for error-checking and debugging.

Lesson

#### Plan in advance

Create detailed plan of end product to start strong and modify as time goes on

Sowjan

#### Go with the flow

Don't fixate on each detail. Try to implement new things as the team sees the need

- Muhammad

# Thank you!

