

MICHIGAN STATE

U N I V E R S I T Y

Alpha Presentation

Digital Avatar Assistant

The Capstone Experience

Team Ally

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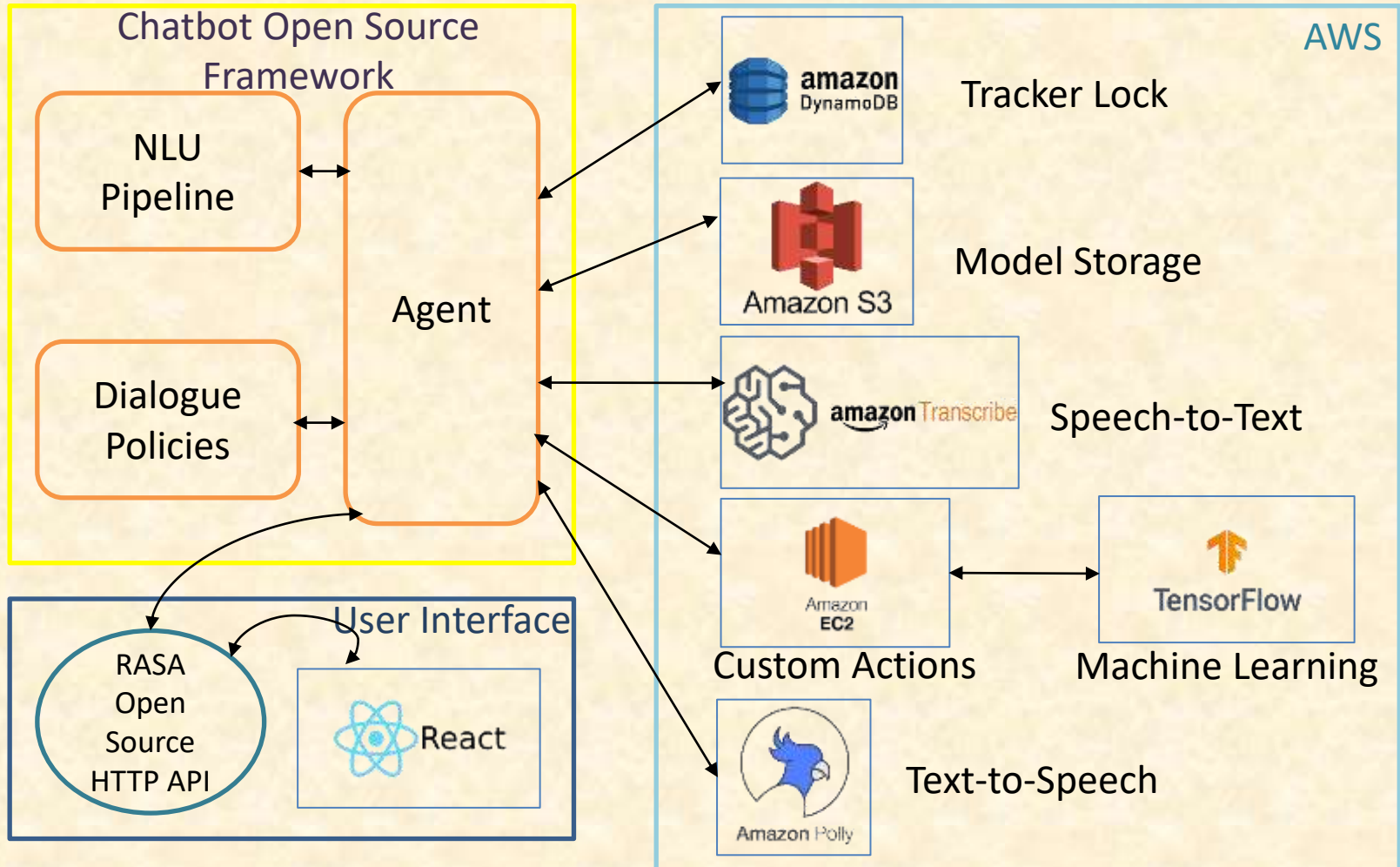
*From Students...
...to Professionals*

Project Overview

- Assistant designed to help with budgeting
- Assistant reads information from user account
- Assistant offers custom predictions and budgets for different categories
- Animated avatar will serve to emulate real conversation between assistant and user



System Architecture



Desktop Website Widget

The screenshot displays the Ally website interface. At the top, there is a navigation bar with the Ally logo and links for Accounts, Payments, Transfers, Deposits, Investments, and More. A secondary navigation bar includes Dashboard, Trading, Investment Accounts, Managed Portfolios, Research, and Tools. A 'QuickTrade' button is visible on the right. The main content area shows a 'Quotes Snapshot' for IBM (International Business Machines Corp). Below this, there is a table with financial data:

LAST PRICE	TODAY'S CHANGE	BID / ASK	ASK (SIZE)	DAY LOW / HIGH	VOLUME
\$153.37	+1.00(0.66%)	\$153.37(100)	\$153.50 (100)	\$152.53 - 153.68	330.

Below the table, there are tabs for 'Income Statement', 'Balance Sheet', and 'Cash Flow'. The 'Income Statement' tab is active, showing a table with columns for 'Trend' and four dates (12/31/2012, 12/31/2012, 12/31/2012, 12/31/2012). The table lists various financial metrics such as Net Revenues, Costs of Goods Sold, Depreciation And Amortization, Gross Income, General Expenses, Research And Development, Total Operating Expenses, Operating Income, Extraordinary Credit, and Extraordinary Charge.

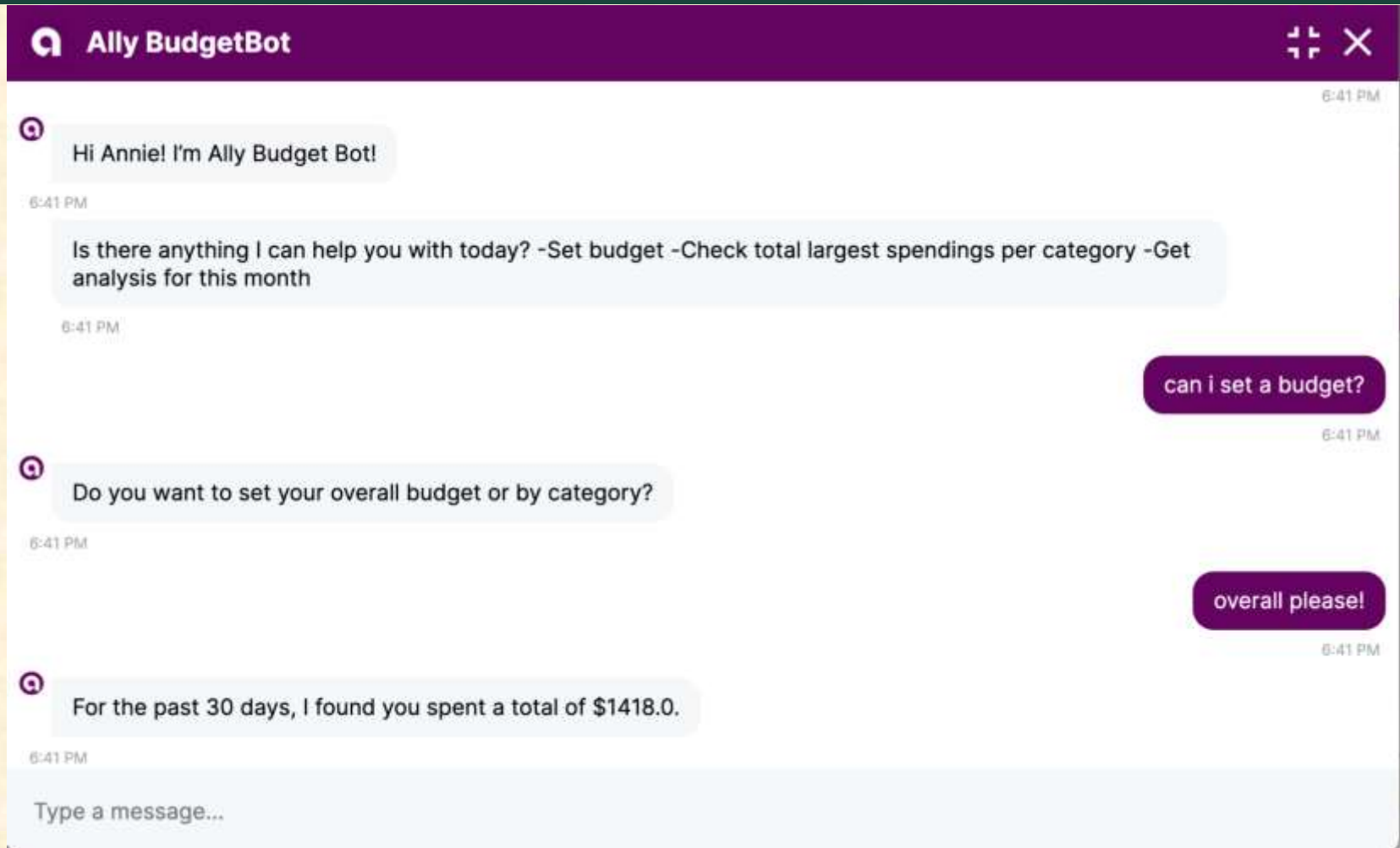
Overlaid on the right side of the page is the 'Ally BudgetBot' widget. It features a purple header with the Ally logo and the text 'Ally BudgetBot'. The widget contains a chat interface with the following messages:

- Ally BudgetBot: Do you want to set your overall budget or by category?
- User: overall please!
- Ally BudgetBot: For the past 30 days, I found you spent a total of \$1418.0.
- User: Type a message...

The widget also includes a close button (X) in the bottom right corner.



Desktop Website Full Screen



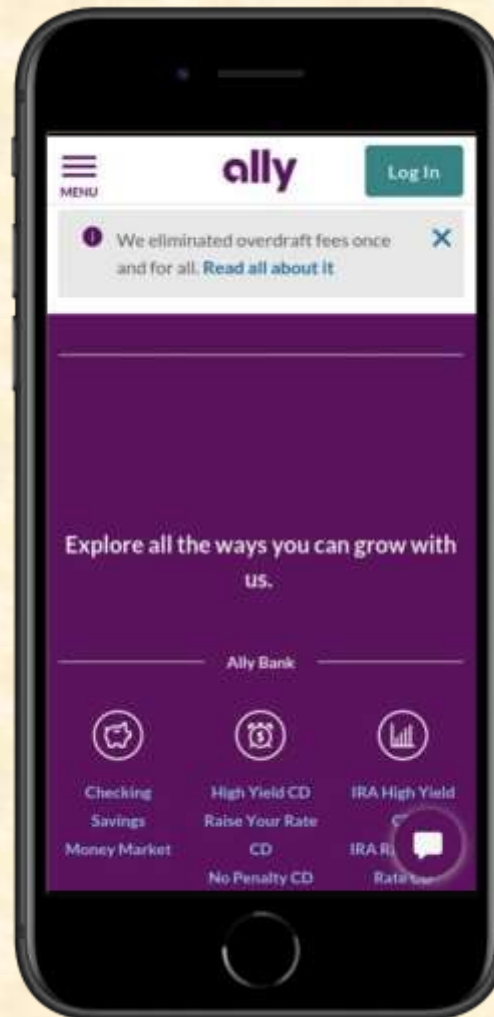
The screenshot shows a chat window titled "Ally BudgetBot" with a purple header bar. The chat interface includes a header with a refresh icon, the name "Ally BudgetBot", and window control icons (maximize, close). The chat history consists of the following messages:

- 6:41 PM** (User): Hi Annie! I'm Ally Budget Bot!
- 6:41 PM** (Bot): Is there anything I can help you with today? -Set budget -Check total largest spendings per category -Get analysis for this month
- 6:41 PM** (User): can i set a budget?
- 6:41 PM** (Bot): Do you want to set your overall budget or by category?
- 6:41 PM** (User): overall please!
- 6:41 PM** (Bot): For the past 30 days, I found you spent a total of \$1418.0.

At the bottom of the chat window is a text input field with the placeholder text "Type a message..."



Mobile Website Button View



Mobile Website Opened



What's left to do?

- Design and animate digital avatar
- Set up backend and deploy bot on AWS
- Add longevity for slot values through querying a database
- Implement ML capabilities for custom actions
- Integrate text-to-speech & speech-to-text capabilities into UI
- Add to NLU for more lifelike conversations



Questions?

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