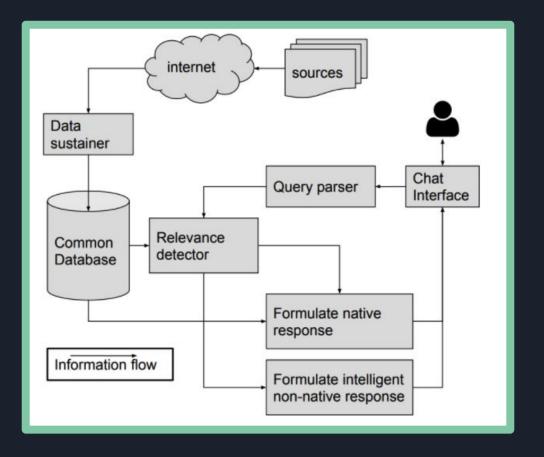
CalPAss Virtual Assistant

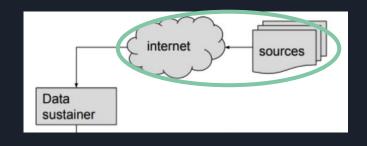
Eddie Aung, Kalen Goo, Kenny Lau

Approach and Strategy



Software Architecture

Cal Poly Schedules

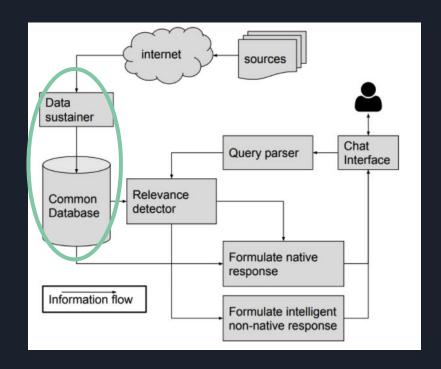


Course	Sect	Class	Туре	GE	Req	Days	Start	End	Instructor	Location
CSC 225	01	5064	Lec		004057	MWF	09:10 AM	10:00 AM	Planck, J	180-0112
CSC 225	02	5065	Lab		004057	MWF	10:10 AM	11:00 AM	Planck, J	014-0255
CSC 225	03	5066	Lec		004057	MWF	11:10 AM	12:00 PM	Planck, J	033-0457
CSC 225	04	5067	Lab		004057	MWE	12:10 PM	01:00 PM	Planck, J	014-0302
CSC 225	05	6115	Lec		004057	MWF	01:10 PM	02:00 PM	Hatalsky, P	020-0128
CSC 225	06	6116	Lab		004057	MWF	02:10 PM	03:00 PM	Hatalsky, P	014-0255
CSC 231	01	1440	Act		002467				Voelker, K	
CSC 248	01	8625	Lec		002089	MW	10:10 AM	12:00 PM	Vakalis, I	014-0251

Name	Alias	Title	Phone	Office	Office Hours	Course	Sect	Type	Days	Start	End	Location
Lupo, Christopher	clupo	Dept Chair Comp Sci & Soft Eng	+1.805.756.5659	014-0254B		CSC 498	19	Ind				10
						CSC 494	01	Ind	37	14	88 2	44
						CSC 400	19	Ind	97	56	No. 2	54
						CSC 491	19	Ind	27			
						CPE 350	07	Lec	TR	03:10 PM	04:30 PM	020-0145
						CPE 350	08	Lab	TR	04:40 PM	06:00 PM	020-0145
						000 504						

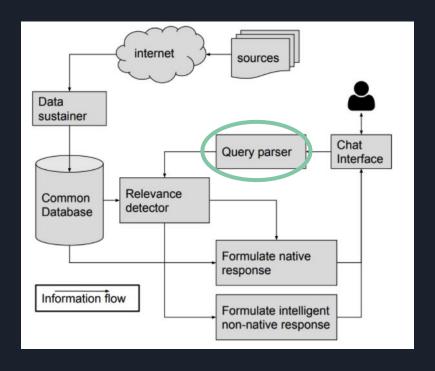
Scraping Data

- BeautifulSoup
- MySQL database
 - Professor Table
 - Course Table



EntityClassifier

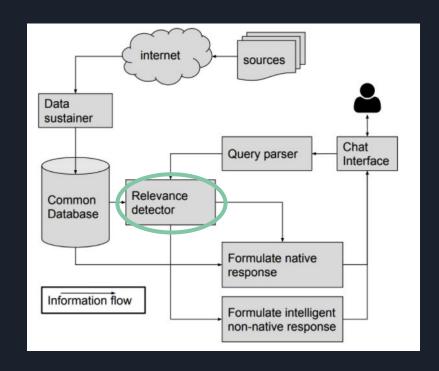
- Naive Bayes Classifier
- PROFs, COURSEs,
 NON-ENTITYs
- Variable substitution



What is Aaron Keen's alias? -> What is [PROF] alias?

QueryClassifier

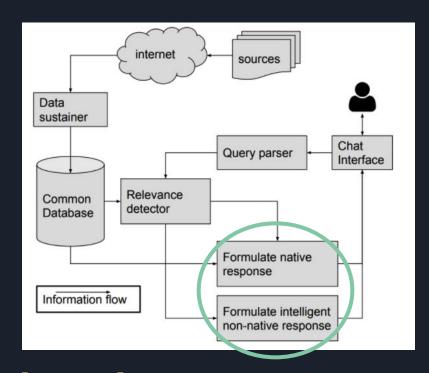
- Tfidf Vectorizer
- Cosine Similarity



What is [PROF] alias? -> [ALIAS]

Retrieving an Answer

- SQL Query
- Answer Formatting



What is [PROF] alias? -> [ALIAS] -> akeen

Live Demo

Shortcomings and Problems

Standardizing Answer Formats in the Question/Answer Pairs

- When does [COURSE] start?
 - [COURSE] starts at [START]
 - o [START]
 - The course begins at [START]

Handling of Multi-Entity Queries

- Who teaches [COURSE]?
- SELECT* FROM Professors INNER JOIN
 Courses ON Professors.courseID =
 Courses.courseID;

Difficulty with Variable Extraction

- When does CSC 365 start?
- Noun Chunking: [CSC 365 start]

Thank You!