ASKSG – The RIT SG Community Overlay

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**MOTIVATION**

How does Student Government (SG) listen to students?
How does SG monitor social media activity?
How does SG determine what’s important to the RIT community?
How does SG quantify student opinion?

Answer: ASKSG

**OVERVIEW**

ASKSG corrals student ideas, questions, and concerns from a variety of online sources into a single portal for RIT SG. The goal is to increase awareness of student issues on campus backed by quantitative data about student interests and sentiments. ASKSG provides a common interface for all directed student questions and inquiries to provide an overarching picture of student sentiment.

**ARCHITECTURE & DESIGN**

- Standard n-tier architecture
- Spring MVC with Roo
  - Provides scaffolding for rapid development of Web MVC layers
  - Exposes application functionality via a RESTful JSON API
- Allows easy extension to support new services using delegation
- Schedules worker tasks to execute semantic crunching and social scraping
- Manages component lifecycles and provides dependency injection
- AngularJS
  - Provides data binding and UI helpers
  - Makes calls into the RESTful backend provided by Spring MVC

**TECHNOLOGIES**

- Spring
- Java
- Roo
- RESTful JSON API
- Hibernate
- AngularJS
- Twitter
- Chatterbox
- LinkedIn
- RIT’s theLoop
- Natural Language Processing
- Video Relay Service for NTID
- Dedicated mobile apps
- Administrator response workflow

**MAJOR SYSTEM FEATURES**

**RIT INTERACTION**

- Read public social media for relevant data
- Conversations received from SMS and email
- Messages are collated in a single interface
- SG Senators may send direct responses

**DATA ANALYTICS**

- Conversation sentiment scores
- Compile words of interest
- Charts and reports with sentiment scores and word counts
- Sentiment data may be exported for offline processing

**PHASED DELIVERY**

- Easy and clear partition of system features
- Incremental functionality and quick stakeholder feedback
- Continuous improvement

**DELIVERED PRODUCT**

- Full support for all required social media channels
- Robust analytics and report generation
- Secure management of user-sensitive data
- Responsive and on-demand driven UI
- Data visualization and reports
- Automatic and user-generated message tagging
- Public site with system introduction
- Dynamic conversation sorting by volume
- Historical and configurable data analysis

**FUTURE WORK**

- Transition to management by ITS
- More Social Networks
- LinkedIn, RIT’s theLoop
- Video Relay Service for NTID
- Natural Language Processing for tagging
- Dedicated mobile apps
- Administrator response workflow

**SOFTWARE CONCEPT**

- Requirements elicitation, and system design start before each implementation step.