**METAMANAGER: A METACOGNITIVE TRAINER**

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**Community Partners:** Trinity College Metacognition Lab

**Trinity College Computer Science Department**

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**MOTIVATION & OVERVIEW**

**Problem:**

Every student wants to excel academically. This involves knowing how one processes and uses information, knowledge and awareness of one’s strengths and weaknesses, and what fosters one’s best performance. In other words — metacognition! The Trinity College Psychology Metacognition Lab has been working with students from the Hartford Magnet Trinity College Academy for several years to study the effects of metacognitive training on academic performance. Results have not been consistently significant and there is a need for better measures of students real world application of the training.

**Solution:**

Android Mobile Application: MetaManager is a task manager that takes the metacognitive process online making it more accessible to students outside of the classroom.

Website: The MetaManager website allows the Metacognition lab to view how students utilizing the mobile app in conjunction with their academic performance.

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**TECHNOLOGY**

- **Development:** The mobile application was developed using the Android Studio IDE.
- **Backend:** Parse.com which provides Mobile Backend as a Service (MaaS) and is used for the mobile app and the website.
- **Data Visualization:** Website uses Highcharts charting library to display interactive graphs.

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**WEBSEBSITE**

- User selects which area of the students’ performance they would like to analyze
- Data is then pulled from the Parse cloud database and calculations are computed
- Data visualization via charts is displayed
- User can download the chart as different image formats

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**MOBILE APPLICATION**

- Port the app to iOS so that it is available for iOS users
- Implement ‘Suggested Plan’ Component: Create a user profile containing information such as user strengths and weaknesses that can be built into suggesting a plan for each assignment

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**ACKNOWLEDGEMENTS**

I would truly like to thank my academic advisor Professor Madalene Spezialetti, the Trinity College Metacognition Lab, led by Professor Dina Anselmi and Professor David Reuman, for their feedback and guidance with this project that will be used in the future to further their metacognition research.