



RU Ready

Backlog Refinement Tool

ELECOMP Capstone Design Project 2019-2020

eMoney Advisor is continuing support of the Program for the 2nd consecutive year:

<https://web.uri.edu/elecomp-capstone/project-details-by-team-2018-2019/emoney-advisor/>

Sponsoring Company:

eMoney Advisor LLC.

100 Westminster St.
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<http://www.emoneyadvisor.com>

Company Overview:

eMoney Advisor is a leading software development company in the FinTech industry. We develop cutting edge web applications used by thousands of financial advisors to plan their clients' financial success. There are over 25 Agile Scrum teams working from locations in several locations around the world to bring these excellent tools to market.

We believe in the Agile principles of self-directed and empowered teams. Staying current in the technology and features of our application is a challenge we gladly accept. We love digging into new technologies and tools just to see what is possible and what sweet capabilities we can add to our product. We are looking forward to partnering with talented engineers from URI to make each other better.

See our website for more details: <https://emoneyadvisor.com/careers/>



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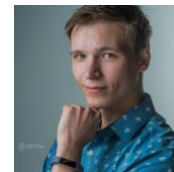
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Project Motivation:

In the Agile process the “Definition of Ready” is used to ensure a unit of work is at a state where it can be worked on with as little risk and delay as possible. A team agrees on a set of statements that must be true in order for the work to be started. There are no tools that currently walk a team through their agreements during the backlog refinement process. Most teams follow manual check lists that work using verbal consent from participants.

During the backlog refinement process there is a lot of discussion about each item. Most of this discussion is not captured in any form. There are many times when team members want to recall the discussions they had about a particular topic. Most often, these team members have to rely on their imperfect memory for details.

The RU Ready application will automate much of the process of walking through a team’s definition of ready. It will provide a guide to discussing the aspects of a story and capture the important points of conversation around that story. Finally, it will track the state of approval for each team member against each item in the team’s definition of ready.



Anticipated Best Outcome:

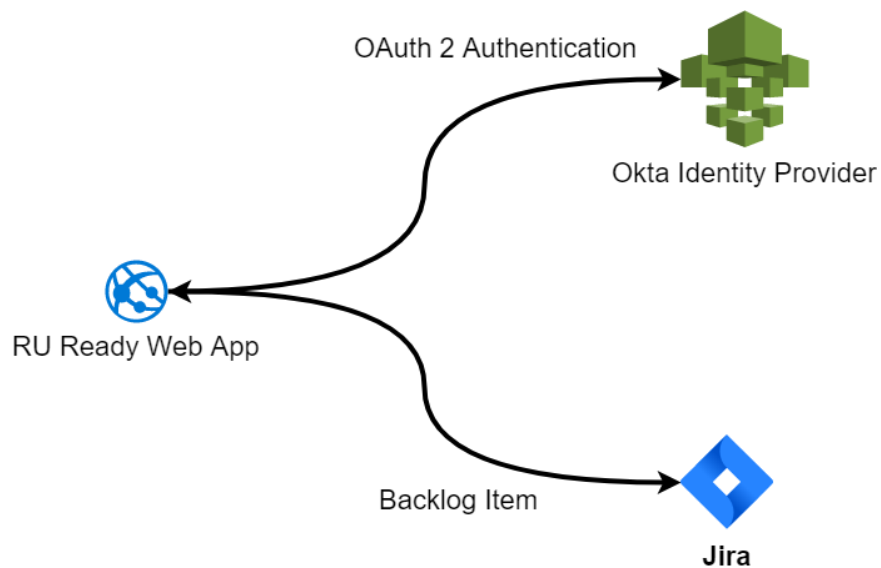
By the end of this project we would like to have a deployable application that is capable of the following features:

1. Create and edit a Team's Definition of Ready
2. Connect to Jira and retrieving backlog items to be reviewed.
3. Present story information with the team's Definition of Ready items
4. Record and track discussion points and approvals from each participant related to Definition of Ready items
5. Signal users when all team members have approved the story against the Definition of Ready
6. Save the results of the discussion back to Jira.

Project Details:

Overall system concept:

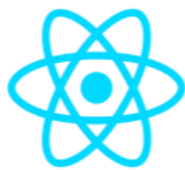
The RU Ready application will be a green field software only project. It will maintain security using Okta as an identity provider. Backlog item information will be retrieved from Jira, a leading issue tracking application.





Technology stack:

RU Ready will use the latest technologies.



React



Redux

Front End



Back End



Azure Tables

Storage



Composition of Team:

2 Computer Engineers

Useful Skills:

No specific tools or skill is required for this project. The most important attribute of a participant of this project is the willingness to learn. If you love working on tech and figuring out how to make something work in code, then you will do well with us. The following list is a set of skills that will be used in the project.

Useful Computer Engineering Skills:

- Object-oriented Programming
 - Language (C#, Java, C++, etc.)
- Web UI Programming
 - HTML
 - Javascript
 - CSS
- Database
 - SQL

In addition to these skills there will be a focus on modern software development principles and processes. Some key ideas to be familiar with are Test Driven Development (TDD), Microservices, and SOLID software design principles.

S – Single Responsibility: An object should only have one purpose.

O – Open/Closed: Software is open to extension but closed to modification.

L – Liskov Substitution: Objects of the same type should be able to be swapped without breaking the application.

I – Interface Segregation: Clients should not be forced to depend upon interfaces that they do not use.

D – Dependency Inversion: High-level modules, which provide complex logic, should be easily reusable and unaffected by changes in low-level modules, which provide utility features.



Anticipated Best Outcome's Economic Impact on Company's Business:

The anticipated best outcome would help each of our teams to communicate about the work they do. By doing this, each team will think through each item of work before they start it. Teams that think through the work they are to do and communicate clearly about it are known to be more consistent and reliable.

Broader Implications of the Best Outcome on the Company's Industry:

There is currently no tool made specifically for coordinating the discussion of stories. If this application is determined to be useful it is possible that it can be adopted by a broader user base in the future.