LambdaUI

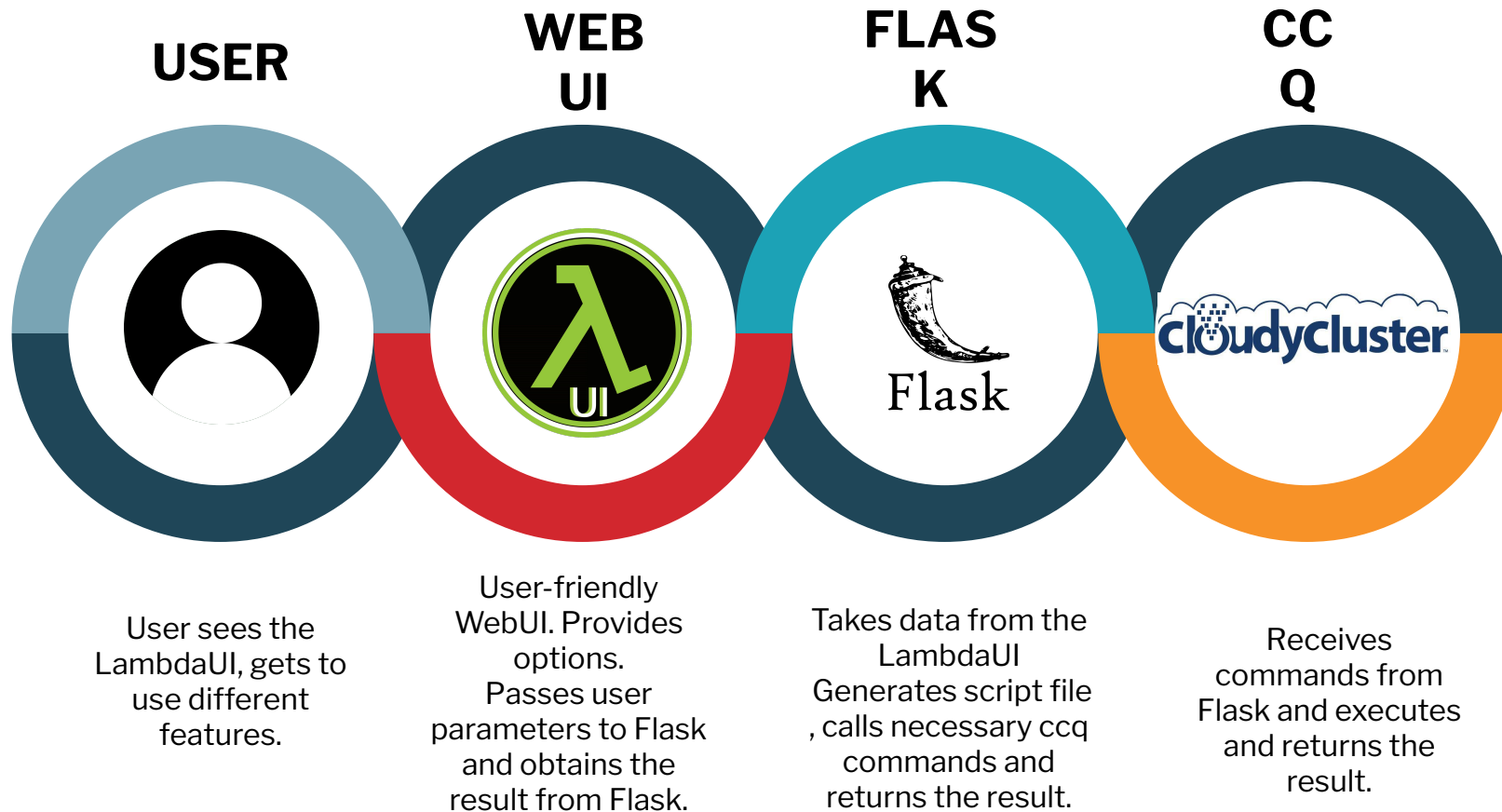USER INTERFACE TO EXECUTE, MANAGE AND MONITOR JOBS ON CLOUDYCLUSTER

What is LambdaUI?

- "lambda"– Abstraction of functions

- Interface to the control terminal

- Abstraction of various functions & commands used to run/view jobs

- Automates script generation

- User need not know the commands/generation of scripts.

LambdaUI: Current Status

USER

WEB UI

FLASK

CCQ

User sees the LambdaUI, gets to use different features.

User-friendly WebUI. Provides options. Passes user parameters to Flask and obtains the result from Flask.

Takes data from the LambdaUI Generates script file , calls necessary ccq commands and returns the result.

Receives commands from Flask and executes and returns the result.

CloudyCluster + LambdaUI

- Extending the CloudyCluster commands and function attributes to a UI.

- Covers more target users

- Time saving

- Moving from a terminal based application to a GUI world.

- Leave the generation of scripts to LambdaUI

Demo

Challenges

- Installing all required dependencies and making sure they work.

- Interfacing notebook widgets to CCQ client methods

- Conflict between AJAX and Flask

- Creating the bridge between back-end python code to the front-end Web interface.

Improvements

- Providing more job and execution information.

- Customizing features for job submissions.

- Providing a logout option.

- Providing visualizations for performance.

Developers

Andrick Adhikari & Nidhi Madabhushi

Mentors: Boyd Wilson

Special Thanks: Rich Asay & Mary