



## **PURPOSE**

USchedule is a web application that was created for Chief Resident Dr. Kelly Jones, at the LAC+USC psychiatry residency program. The program has 24 residents who rotate working in 4 different wards within the facility.

Dr. Jones is responsible for the creation of a call schedule that covers a 6 month period, where each resident is assigned to work a 2 month block. Within each block there must be one first year resident and one second year resident assigned to each of the four wards. The residents also work different types of shifts each week within their respective blocks.

The purpose of USchedule is to accelerate this process, which in the past has taken Dr. Jones over 100 hours a years to create. The application consists of 'Welcome', 'Resident', 'View Schedule', and 'Create Schedule' pages. Through USchedule's 'Resident' page, Dr. Jones is able to manage a list of resident information that is used to generate the call schedule for the program.

## RESOURCES

USchedule's graphical user interface was created using Node.js and React.

Our MySQL database is hosted through LMU Build on MySQL RDS.

The scheduling algorithm and the database access object are both written in Python.

We used a Flask application also written in Python to connect front-end, algorithm, and back-end all together.