

SDMAY18-37 - System and app for managing general faculty/staff parking on ISU campus  
Advisor: Ahmed E. Kamal

Donavan Brooks: Backend Lead  
Derrick Lockwood: Team Lead  
Joseph Krajcir: Quality Assurance  
John Ingwersen: Mobile Master  
Riley Snyder: Webmaster  
Mason Schreck: Communications Lead

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### **Weekly Summary:**

#### **Past Week Accomplishments:**

Donavan Brooks: Finished adding clickable functionality to dataset creator tool. Red drew bounding boxes for test lot

Derrick Lockwood: Served Beta 1.0 release. Created issues to resolve for release 1.0. Administrative tasks. Completed multi camera support and started on UI for viewing of parking lot updates.

Joseph Krajcir: Created a view component for each lot. This makes it easier to display the correct overlay for a selected lot. Completed overlay for lot 112D-2(test lot). Started working on coupling the graphical overlay to the image of the lot, which will allow the overlay to change size according to the size of the parent view.

John Ingwersen: Added ability to save a favorite lot on the home screen. Currently just tied to the local app and not a user account but subject to change if we want. Also resolved iOS dependency issues for spot drawing.

Riley Snyder: Working on deployment scripts for pre processing. Set up 2 more raspberry pis as a test environment.

Mason Schreck: Implemented web platform UI with spot drawing

#### **Pending Issues:**

Donavan Brooks: Updating dataset

Derrick Lockwood: Current crash of asynchronous read of image file.

Joseph Krajcir: Overlay is currently hard coded in

John Ingwersen: Only re drawing spots that are changed, not the entire page. Abstract method of drawing lot images.

Riley Snyder: Pre Processing stops after ~3 days.

Mason Schreck: Write render/update function to avoid screen refresh

**Individual Contributions:**

<b>Name</b>	<b>Individual Contributions</b>	<b>Hours This Week</b>	<b>Hours Cumulative</b>
Donavan Brooks	Added clickability functionality. Changed dataset to images with new bounding boxes	10	96
Derrick Lockwood	Multi camera support and Tool UI for looking at camera	10	110
Joseph Krajcir	Lot view component. Lot 112D-2 overlay.	13	84
John Ingwersen	iOS dependencies and lot saving	12	90
Riley Snyder	Investigating problems, started on deployment scripts	12	92
Mason Schreck	Implemented the first platform page for lot 112D-2, fought async issue	17	95

**Comments and extended discussion:**

**Plan for coming week:**

Donavan Brooks: Add new images to dataset. Finish new tool that allows admin users to draw bounding boxes for new lots and automatically save them to database.

Derrick Lockwood: Fix asynchronous issue.

Joseph Krajcir: Couple the graphical overlay to the image of the lot.

John Ingwersen: Create a more viable homepage and work on lot drawing efficiency.

Riley Snyder: Finish pre processing scripts, start on post processing. Find bug in current preprocessing code/implementation.

Mason Schreck: Plan to write update/render function, and clean up the code, currently not so pretty, and being implementing angular routing for pages to flow and get our whole site navigation mapped out.