

# SmartPark

Cal Poly CPE Senior Project  
Author: David Cosgrove  
Advisor: Professor Slivovsky  
6/12/13

Getting Started	4
Logging In	4
Main Menu	4
Admin Controls	5
Space Management	5
Transaction History	5
Current Status	5
User Controls	6
Adding Funds	6
Transaction History	6
Mobile Application	7
Initial Setup	7
How to Pay for Parking	7
Troubleshooting	8

## Getting Started

The first thing anyone using the SmartPark system will need to do is to create a new account. To do so,

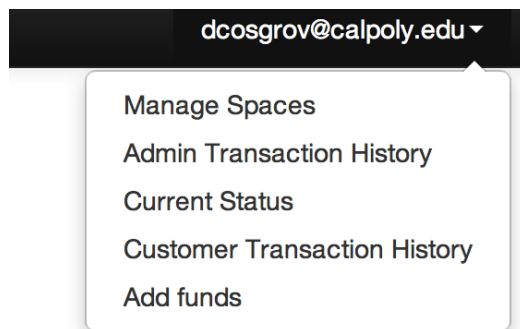
- 1) Navigate to the SmartPark website and click the large “Join Now” in the middle of the screen.
- 2) Follow the on-screen instructions, and finish by clicking the “Register” button

## Logging In

After registering, you can log in to your account by using the form located in the upper right corner of the screen.

## Accessing the Main Menu

After logging in, you can access the main menu by clicking your e-mail on the upper right side of the screen:



Main Menu

# Admin Controls

Admin controls are intended for users that are going to be managing parking lots/parking infrastructure.

## Manage Spaces

On this screen, administrators can add new parking spaces to their list of managed spaces, view a list of their existing parking spaces, and get details about existing parking spaces(including QR codes).

On the left side of the screen, you are shown a list of parking spaces that you currently manage.



Sample list of parking spaces

*Retrieve Info About A Space* - Simply click on a parking space to see the information and QR code of the associated space. QR codes are the unique identifiers of each parking space. They should be physically attached to the parking space or parking meter in some way.

*Add A Parking Space* - Clicking the “add a parking space” link will bring a new form to the front where you can add one or more spaces. Simply fill in the information for the space as instructed on screen and press “add space”. You will see that the space is immediately added to your list of managed spaces. Press the “Close” button when you are done adding spaces.

## Admin Transaction History

Clicking this link will bring up a table showing transactions that occurred at your parking spots.

## Current Status

Clicking this link show you a list of your managed parking spaces and whether or not they are occupied. This feature can be utilized by parking enforcement to check whether a given space is expired without needing to scan the space's QR code.

# User Controls

## Add funds

Add credit to your SmartPark account to use when paying for parking. Follow the on screen options and choose your preferred payment options to charge credit.

For the demo version of this application, the charge is simulated.

## Customer Transaction History

Clicking this link will bring up a table showing transactions that you have made, including both credit you added and deductions from parking payments, along with the date and information about the space that you were charged for.

### *Sample Transaction History*

Date	Amount	Description
Thu Jun 06 2013 14:09:38 GMT-0700 (PDT)	-5.5	Higuera 3
Thu Jun 06 2013 14:09:55 GMT-0700 (PDT)	-0.42	Higuera 3
Thu Jun 06 2013 14:11:00 GMT-0700 (PDT)	50	Account credit
Fri Jun 07 2013 01:36:11 GMT-0700 (PDT)	-4.08	Higuera 1

# Mobile Application

## Setup

- 1) Install the SmartPark app.
- 2) Install Barcode Scanner from the Google Play Store.
- 3) When launching the app for the first time, follow the on screen instruction to log in to your account.

## How to pay for parking

- 1) Launch the SmartPark app.
- 2) Touch the "Start Scan" button.
- 3) Hold your camera up to the QR code, moving it into the moving frame, until it is detected.
- 4) Confirm that the details of the space on the screen match the space you are standing next to.
- 5) Move the slider to select a parking duration.
- 6) Click "Confirm Payment".

That's it! SmartPark will automatically notify you when your parking meter has expired.

## Troubleshooting

Q: After clicking “Start Scan” in the mobile application, the scanner did not start.

A: You need to install the “Barcode Scanner” app from the Google Play Store.