```
var io = require('socket.io')(server);
function updateBTCPrice() {
        http.get({
                host: 'api.coindesk.com',
                path: '/v1/bpi/currentprice.json'
                },
                function(response) {
                        var body = ";
                        response.on('data', function(d) { body += d; });
                        response.on('end', function() {
                                        var parsed = JSON.parse(body);
                                         console.log(parsed.bpi.USD.rate);
                                         io.emit('btc_price_change', parsed.bpi.USD.rate);
                        });
                }
        );
}
io.on('connection', function (socket) {
        updateBTCPrice();
});
// If wanted
setInterval(updateBTCPrice, 100000);
var bitcoinTransaction = require('bitcoin-transaction');
```

```
// BTC
//NEW ADDRESS: cT44ADFtj3HBVzCgAq2CEqPzc7ddFzt5UtFra4FNQA3zWCmcMjTU
//NEW PUBLIC ADDRESS: mjeBxXLF7FBgFMBCNzLuGsaWLZwgemkQtB - Balance = 0.48991 BTC
//New ADDRESS 2: cTmctuuAC9cVScvcAKK1aPx22ZWwpovdbYX9VrLpYHD1351HsQPJ
//NEW PUBLIC ADDRESS2: mkiKq29QCizK7qBn25m6tBZPkBnNZmrqT5 - Balance = 0.04 BTC
//New ADDRESS 3: cU8nsaoRV4NAR1dmtggEvDnuiG64r5kqq8Vs93Q9fv6FQ43cG8TW
//NEW PUBLIC ADDRESS2: mrs26XNm7wZggDdt8yGV8rLXhLWSA6Fcm8 - Balance = 0.9375 BTC
function findConfirmedPayment(){
       AM.findConfirmedPayment(foundConfirmedPayment);
}
var tempUser;
function foundConfirmedPayment(user, clientWallet){
       console.log("Client Wallet Address: " + clientWallet);
       // Save username
       tempUser = user;
       // Send bitcoins
       sendBTC(clientWallet, 0.01);
}
// Gets called with text=tx_id
```

```
function transactionCallback(tx_id){
       console.log("Bitcoins Sent!");
       //Save txID in appropriate place in database
       AM.saveTXIDWithUsername(tempUser, tx_id);
}
function sendBTC(to, amount){
       //Send all btc
       var from = "mrs26XNm7wZggDdt8yGV8rLXhLWSA6Fcm8";
       var privKeyWIF = "cU8nsaoRV4NAR1dmtggEvDnuiG64r5kqq8Vs93Q9fv6FQ43cG8TW";
       bitcoinTransaction.getBalance(from, { network: "testnet" }).then((balanceInBTC) => {
               console.log("amount " + amount + " balance " + balanceInBTC);
               if (balanceInBTC > amount){
                       var txID = bitcoinTransaction.sendTransaction({
                                      from: from,
                                      to: to,
                                      privKeyWIF: privKeyWIF,
                                      btc: amount,
                                      network: "testnet"
                       }, transactionCallback);
               }
               else
               {
                       console.log("Not enough funds");
               }
```

```
});
app.get('/orders', function (req, res) {
        console.log("GET ORDERS");
        var query = { "orders" : { $exists : true } };
        AM.getSpecificRecords(query, function(e, result) {
                console.log(result);
                res.render('orders', {
                        title: 'Control Panel',
                        countries: CT,
                        udata: req.session.user,
                        orders: result
                });
        });
 });
app.post('/orders', function(req, res) {
        if(!req.body.confirmCheckbox){
                console.log("POST ORDERS: No checkboxes selected");
        }
        AM.confirmPayment(req.body.confirmCheckbox, function(e, result){
                console.log("POST ORDERS: confirmPayment callback");
                findConfirmedPayment();
                res.status(200).send('ok');
```

}

```
});
// Purchase //
app.get('/purchase', function (req, res) {
       console.log("GET PURCHASE");
       res.render('purchase', {
               title: 'Control Panel',
               countries: CT,
               udata: req.session.user
       });
});
app.post('/purchase', function(req, res) {
       console.log("POST PURCHASE");
       var udata = req.session.user;
       AM.placeOrder({
                               : udata.name,
               name
               email
                               : udata.email,
                               : udata.user,
                user
                pass
                               : udata.password,
               country
                               : udata.country,
               orderNumber: udata.orderNumber,
```

});

```
btc
                                : req.body['btc'],
                        gbp
                                : req.body['gbp'],
                        btc_address : req.body['btc_address']
                }, function(e){
                        if (e){
                                console.log("/Purchase POST placeOrder callback SUCCESS: " + e);
                                res.status(200).send('ok');
                        }
                                else{
                                console.log("/Purchase POST placeOrder callback FAILURE: " + e);
                                res.status(400).send('error');
                        }
                });
        });
// logged-in user homepage //
        app.get('/home', function(req, res) {
                if (req.session.user == null){
                        console.log("Not Logged in");
                        ///if user is not logged-in redirect back to login page //
                        if(req.cookies.user)
                        {
                                console.log("Cookie found for: " + req.cookies.user);
                                AM.manualLogin(req.cookies.user, req.cookies.pass, function(o){
                                         if (o != null){
```

dateIssued: udata.dateIssued,

```
console.log("Autologin success");
                                 req.session.user = o;
                                 res.redirect('/home');
                        }
                                 else{
                                console.log("Autologin not successful");
                                res.render('home', {
                                         title: 'Control Panel',
                                         countries: CT
                                });
                        }
                });
        }
        else{
                res.render('home', {
                        title: 'Control Panel',
                        countries: CT
                });
        }
}
        else{
        console.log("Logged IN!");
        res.render('home', {
                title: 'Control Panel',
                countries: CT,
                udata: req.session.user
        });
}
```

```
});
// When login form submitted
app.post('/home', function(req, res){
        console.log("POST Not Logged in");
        if(req.body['country'] == undefined){
                // Attempt to login
                AM.manualLogin(req.body['user'], req.body['pass'], function(e, o){
                        if (!o){
                                res.status(400).send(e);
                        }
                                else{
                                req.session.user = o;
                                if (req.body['remember-me'] == 'true'){
                                        res.cookie('user', o.user, { maxAge: 900000 });
                                        res.cookie('pass', o.pass, { maxAge: 900000 });
                                }
                                res.status(200).send(o);
                        }
               });
        }else{
                console.log("1");
                AM.addNewAccount({
                        name : req.body['name'],
                        email : req.body['email'],
                        user
                                : req.body['user'],
                                : req.body['pass'],
                        pass
```

country: req.body['country']

```
}, function(e){
                                if (e){
                                        console.log("creation failed");
                                        res.status(400).send(e);
                                }
                                        else{
                                        console.log("account created");
                                        res.cookie('user', req.body['user'], { maxAge: 900000 });
                                        res.cookie('pass', req.body['pass'], { maxAge: 900000 });
                                        res.status(200).send('ok');
                               }
                        });
                }
        });
exports.placeOrder = function(newData, callback)
{
        accounts.findOne({user:newData.user}, function(e, o) {
                if (o){
                        accounts.findOne({email:newData.email}, function(e, o) {
                                if (o){
                                        var orderNumber = 1;
                                        if (newData.orderNumber) orderNumber +=
newData.orderNumber;
                                        var order = [{ orderNumber: orderNumber , btc:
newData.btc, gbp: newData.gbp, btc_address: newData.btc_address, dateIssued:
moment().format('MMMM Do YYYY, h:mm:ss a'), confirmed: 'false' }]
                                        accounts.update(o, {$set : {"orders":order}}, function(err,
res) {
```

```
if (err) throw err;
                                                 console.log("1 document updated");
                                                 callback(1);
                                         });
                                 }
                                         else{
                                         console.log("Email not found");
                                 }
                        });
                }
                        else{
                         console.log("Username not found");
                }
        });
}
exports.confirmPayment = function(selectedIndex, callback)
{
        console.log("AM");
        // var query = { "orders" : { $exists : true } };
        // accounts.find(query).toArray(function(e, result) {
        //
                console.log(result[selectedIndex]);
        //
                //result[selectedIndex].orders[0].confirmed = true;
        //
                //accounts.update ({_id: '123'}, { '$set': {"friends.0.emails.0.email" : '2222'} });
        //
                //result.orders[0].confirmed = true;
        //
                // accounts.update(result, function(err, res) {
        //
                //
                         if (err) throw err;
```

```
//
        //
                console.log("1 document updated");
        //
//
                callback(1);
//
        // });
// });
var selected_username = null;
var selected_email = null;
var selected_orderNumber = null;
var query = { "orders" : { $exists : true } };
accounts.find(query).toArray(function(e, result){
        //First - identify order by username, email and ordernumber
        if(!selectedIndex) {
                console.log("nothing selected");
                return;
        }
        selected_username = result[selectedIndex].user;
        selected_email = result[selectedIndex].email;
        selected_orderNumber = result[selectedIndex].orders[0].orderNumber;
        accounts.findOne({user:selected_username}, function(e, o) {
                if (e){
                        callback(e, null);
                }
                        else{
                        console.log(o);
                        o.orders[0].confirmed = "true";
                        accounts.save(o, {safe: true}, callback);
```

```
}
                });
        });
}
exports.findConfirmedPayment = function(callback)
{
       var query = { "orders" : { $exists : true } };
        // Find confirmed payment
        accounts.findOne(query, function(e, o) {
                if (e){
                        callback(e, null);
                }
                        else{
                        // return username if the order has been confirmed and if tx_id field doesnt
exist
                        if(o.orders[0].confirmed == "true" && !o.orders[0].tx_id ){
                                callback(o.user, o.orders[0].btc_address);
                        }
                }
        });
}
// Return username of user with confirmed payment
exports.saveTXIDWithUsername = function(tempUser, tx_id)
{
        console.log("Saving tx_id :" + tx_id + " For user: " + tempUser);
```

```
var query = { "user" : tempUser };
        // Find confirmed payment
        accounts.findOne(query, function(e, o) {
                if (e){
                        callback(e, null);
                }
                        else{
                        // save tx_id
                        o.orders[0].tx_id = tx_id;
                        accounts.save(o, {safe: true});
                        console.log("Saved tx_id!");
                }
        });
}
head
  title Massively by HTML5 UP
  meta(charset='utf-8')
  meta(name='viewport', content='width=device-width, initial-scale=1, user-scalable=no')
  link(rel='stylesheet', href='/css/font-awesome.min.css')
  link(rel='stylesheet', href='/css/main.css')
  link(rel='stylesheet', href='/css/noscript.css')
  nav
    .top
       | Welcome to Bitcoin!
      if udata
```

```
| Logged in as,
        p= udata.user
      else
        a(href='/home#login') Click here to login
html
 body.is-loading
  #wrapper.fade-in
   include navigation.jade
   #main
    #myModal.modal
     .modal-content
      span.close ×
      p Confirmed order
       a(href="")
    if !user.orders
     - user.orders = orders
    if user.orders
     form(method="post")#confirmOrder-form
      if user.admin == "true"
       h2.h2_small.text-center Orders [Admin]
      else
       h2.h2_small.text-center Orders
      .orderMainHolder
       - var iteration = 0;
       if user.admin == "true"
```

table.tg

```
tr
```

```
th.tg-u6aq Username
  th.tg-u6aq Email
  th.tg-u6aq Order Number
  th.tg-u6aq BTC
  th.tg-u6aq GBP
  th.tg-u6aq Date Issued
  th.tg-u6aq Confirm
each field in orders
 if field.orders[0].confirmed == "false"
  tr
   td.tg-us36= field.user
   td.tg-us36= field.email
   td.tg-us36= field.orders[0].orderNumber
   td.tg-us36= field.orders[0].btc
   td.tg-us36= field.orders[0].gbp
   td.tg-us36= field.orders[0].dateIssued
   td.tg-us36
    input(type="radio", name="confirmCheckbox", value= iteration++)
if iteration == 0
tr
   td.tg-us36
   td.tg-us36
   td.tg-us36
   td.tg-us36
   td.tg-us36
   td.tg-us36
```

```
td.tg-us36
       else
        table.tg
          tr
             th.tg-u6aq Order Number
             th.tg-u6aq BTC
             th.tg-u6aq GBP
             th.tg-u6aq Rate
             th.tg-u6aq Date Issued
             th.tg-u6aq Blockchain Transaction ID
             th.tg-u6aq.orderPaidColomn Paid?
          tr
             td.tg-us36= user.orders[0].orderNumber
             td.tg-us36= user.orders[0].btc
             td.tg-us36= user.orders[0].gbp
             td.tg-us36 -
             td.tg-us36= user.orders[0].dateIssued
             td.tg-us36= user.orders[0].tx_id
             td.tg-us36= user.orders[0].confirmed
      input(type='submit', value='Submit')
#account-form-container.center-vertical
        form(method="post")#purchase-form.form-horizontal.well
          .bottom_article_header
          .form-group.article_input
          label.control-label.col-sm-2 BTC
           .col-sm-3
```

```
input.form-control#btc_input.article_input_field(type='text', name='btc', value=
user.btc)
          .form-group.article_input
           label.control-label.col-sm-2 GBP
           .col-sm-9
            input.form-control#gbp_input.article_input_field(type='text', name='gbp', value=
user.gbp)
          .form-group.article_input
           label.control-label.col-sm-2 Your Bitcoin Wallet Address
           .col-sm-9
            input.form-control#btcAddress_input.article_input_field(type='text',
name='btc_address', value= user.btc_address)
          hr
          .form-buttons.article_buttons
           button(type='button')#account-form-btn1.btn.btn-default._purchase_cancle_Button
           button(type='submit')#account-form-btn2.btn.btn-primary._purchase_submit_Button
          .clearfix
var socket = io();
var btc_price = 1;
socket.on('connect', function(){
 $('.btc_price').html("1BTC = " + btc_price);
});
socket.on('disconnect', function(){});
socket.on('btc_price_change', function(msg){
  console.log(msg);
  btc_price = msg;
```

```
$('.btc_price').html(btc_price);
});
$('#confirmOrder-form').ajaxForm({
        beforeSubmit: function(formData, jqForm, options){
                console.log("Confirm Order before submit");
                return 1;
        },
        success : function(responseText, status, xhr, $form){
                console.log("Confirm Order Success");
                $('.modal').show();
                // Display confirmation
        },
        error: function(e){
                console.log("Confirm Order Error");
        }
});
(function($) {
        $(document).ready(function() {
                console.log("test");
                // Set navigation
                $('#homeNavButton').removeClass('active');
                $('#purchaseNavButton').removeClass('active');
                $('#ordersNavButton').addClass('active');
```

```
console.log($("#main").length);
                $( ".close" ).click(function() {
                        $(".modal").hide();
                        location.reload();
                 });
        })
$(document).ready(function() {
        // Set navigation
        $('#homeNavButton').removeClass('active');
        $('#purchaseNavButton').addClass('active');
})
$('#purchase-form').ajaxForm({
        beforeSubmit: function(formData, jqForm, options){
                console.log("purchase before submit");
                return 1;
        },
        success : function(responseText, status, xhr, $form){
                console.log("purchase success");
                $('.modal').show();
                // Display confirmation
        },
        error: function(e){
                console.log("purchase error");
        }
});
```

```
$( ".close" ).click(function() {
        $(".modal").hide();
 });
$('#btc_input').on('input', function() {
        var btc_price = parseFloat($(".btc_price").text().replace(',', "));
        var user_btc_input = $("#btc_input").val();
        console.log(btc_price);
  $('#gbp_input').val(btc_price * user_btc_input);
});
$('#gbp_input').on('input', function() {
        var btc_price = parseFloat($(".btc_price").text().replace(',', "));
        var user_gbp_input = $("#gbp_input").val();
        console.log(btc_price);
  $('#btc_input').val(user_gbp_input / btc_price);
});
var myLatLngs = [{lat: 51.507389, lng: -0.127755}
        , {lat: 51.607389, lng: -0.127755}
        , {lat: 51.407389, lng: -0.127755}
```

```
, {lat: 51.407389, lng: -0.437755}
        , {lat: 51.407389, lng: -0.317755}
        , {lat: 51.507389, lng: -0.237755}
];
function initAutocomplete() {
       var map = new google.maps.Map(document.getElementById('map'), {
               center: {lat: 51.507389, lng: -0.127755},
               zoom: 11,
               mapTypeId: 'roadmap'
       });
        map.data.loadGeoJson('../Google/London.json');
        map.data.setStyle({
               fillColor: 'green',
               strokeWeight: 1
       });
       // Create the search box and link it to the UI element.
        var input = document.getElementById('pac-input');
        var searchBox = new google.maps.places.SearchBox(input);
        map.controls[google.maps.ControlPosition.TOP_LEFT].push(input);
        // Bias the SearchBox results towards current map's viewport.
        map.addListener('bounds_changed', function() {
```

```
searchBox.setBounds(map.getBounds());
});
var markers = [];
               // Clear out the old markers.
markers.forEach(function(marker)
{
        marker.setMap(null);
});
markers = [];
var icon = 'http://maps.google.com/mapfiles/ms/icons/green-dot.png';
for (var i = 0, len = myLatLngs.length; i < len; i++) {
        markers.push(new google.maps.Marker({
                map: map,
                icon: icon,
                position: myLatLngs[i]
        }));
 }
// Listen for the event fired when the user selects a prediction and retrieve
// more details for that place.
searchBox.addListener('places_changed', function() {
        var places = searchBox.getPlaces();
```

```
if (places.length == 0) {
       return;
}
// For each place, get the icon, name and location.
var bounds = new google.maps.LatLngBounds();
places.forEach(function(place) {
if (!place.geometry) {
       console.log("Returned place contains no geometry");
       return;
}
icon = 'http://maps.google.com/mapfiles/ms/icons/red-dot.png';
// Create a marker for each place.
markers.push(new google.maps.Marker({
        map: map,
       icon: icon,
       title: place.name,
        position: place.geometry.location
}));
if (place.geometry.viewport) {
       // Only geocodes have viewport.
       bounds.union(place.geometry.viewport);
} else {
        bounds.extend(place.geometry.location);
```

```
}
                });
                if (map.getZoom() > 0) {
                        console.log(map.getZoom());
                }
                map.fitBounds(bounds);
                map.setZoom(12);
        });
}
if !udata
    article.login_form
     #login
      form.well(id='form-login', method='post')
        .bottom_article_header
        h2 Hello!
        h6 Please Login To Your Account
        .form-group.article_input
        label.article_input_field Username
        input.article_input_field.form-control(type='text', id='user-tf', name='user')
        .form-group.article_input
        label.article_input_field Password
         input.article_input_field.form-control(type='password', id='pass-tf', name='pass')
        .controls.article_buttons
         button(type='submit').btn.btn-primary.button-sign-in
          span.glyphicon.glyphicon-lock
```

```
| Sign In
.clearfix
hr
.btm-links.article_footer
#forgot-password
a(href='#') Forgot Your Password?
#create-account.createAccountButton
a(href='/signup') Create An Account
.clearfix
include modals/alert
article.signup_form.hide_me
include account
```