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CP476 Internet Computer Project Phase - 2

WRITERSBLOCK

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Table of Contents

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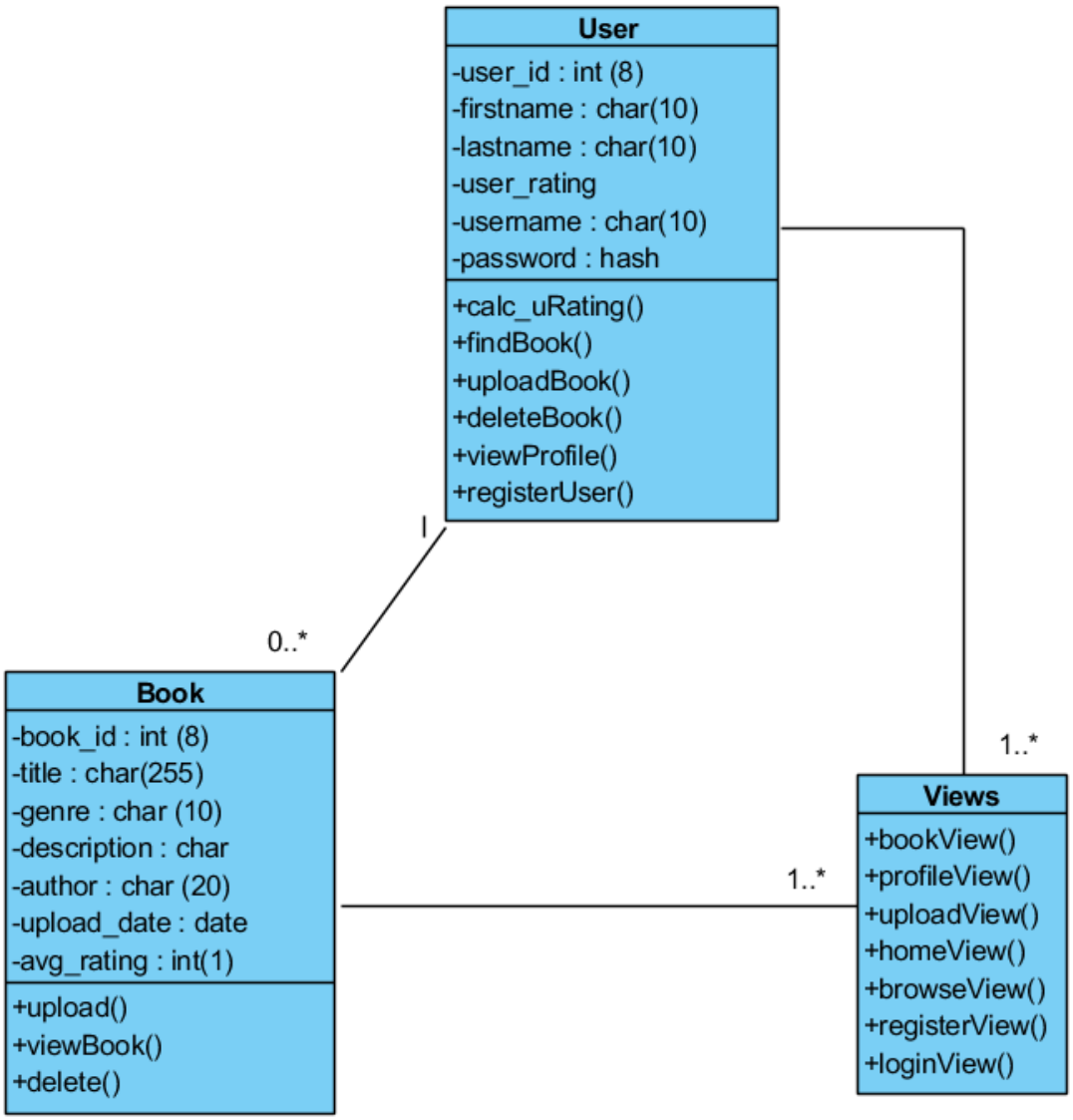
UML Class Diagram



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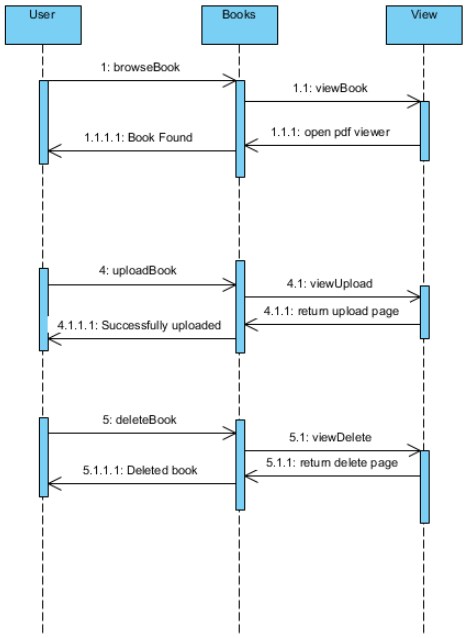
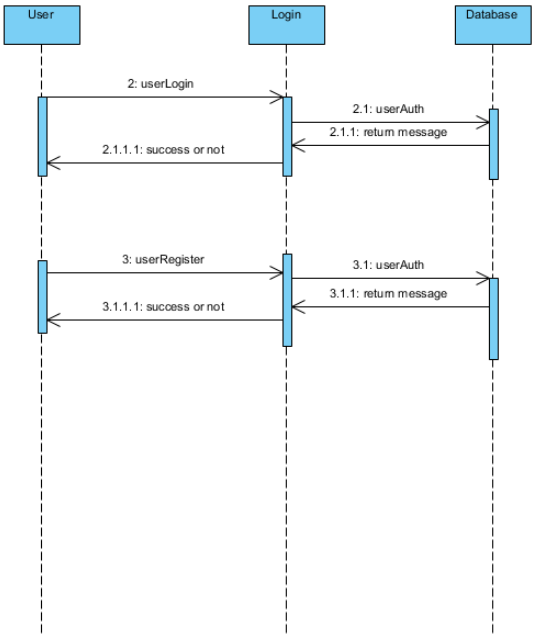
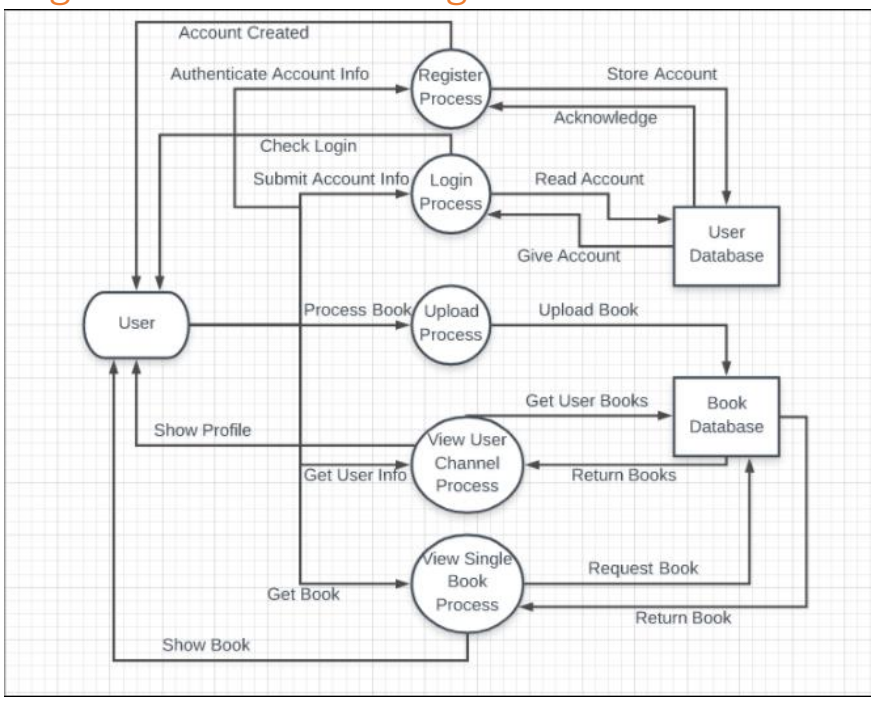
UML Sequence Diagram





Logical Level 1 DFD Diagram



Entity Relationship Diagram

- N/A – We are using NoSQL which does not implement tables at all

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Application Interface Snippet

Code Snippets of classes, implementations, and clients that have been implemented…

User snippet

```
var express = require('express');
var router = express.Router();
var passport = require('passport');
var LocalStrategy = require('passport-local').Strategy;
var crypto = require('crypto');
var User = require('../models/user');
const uuidv1 = require('uuid/v1');


// Register
router.get('/register', function(req, res){
  if(req.isAuthenticated()){
    //Get username info
    res.redirect('/index')
  }
  else{
    res.render('register')
  }

});

// Login
router.get('/login', function(req, res){
  if(req.isAuthenticated()){
    //Get username info
    res.redirect('/index')
  }
  else{
    res.render('login')
  }

});
```

```
// Register User
router.post('/register', function(req, res){
  var name = req.body.name;
  console.log("THE NAME IS")
  console.log(name)
  var email = req.body.email;
  var username = req.body.username;
  var upassword = req.body.password;
  var upassword2 = req.body.password2;
  var Cloudant = require('@cloudant/cloudant');
  var me = '1f4f3453-d758-4393-a422-2010efd3d530-bluemix'; // Set this to your own account
  var cpassword = '28a1e839547250fe22c3e85e46c9f6200a26428ccd6fa95ade3778162b939779';
  var cloudant = Cloudant({account:me, password:cpassword});
  cloudant.db.list(function(err, allDbs) {
    console.log('All my databases: %s', allDbs.join(', '))
  });


   var newUser = {
    "name": name,
    "email": email,
    "username": username,
    "password": upassword,
    "book_ids" : "",
    "rating": 0,
    "book_count" : 0
    }
    console.log("Now creating the user")

   User.createUser(newUser, function(err, user){
     if(err) throw err;
     console.log("ESKITTIT"+newUser);
   })

   req.flash('success_msg', 'You are regist      n now login');
```

```
passport.use(new LocalStrategy(
  function(username, password, done) {
   User.getUserByUsername(username, function(err, user){
    if(err) throw err;
    if(!user){
      return done(null, false, {message: 'Unknown User'});
    }

    User.comparePassword(password, user.password, function(err, isMatch){
      if(err) throw err;
      if(isMatch){
        console.log("It is a match and the user id is id"+user._id)
        return done(null, user);
      } else {
        return done(null, false, {message: 'Invalid password'});
      }
    });
   });
  }));

passport.serializeUser(function(user, done) {
  console.log("And now onto serializeUser we have id of: "+user._id)
  done(null, user._id);
});

passport.deserializeUser(function(id, done) {
  User.getUserById(id, function(err, user) {
    console.log("Getting user by id: "+user)
    done(err, user);
  });
});
```

```
router.post('/login',
  passport.authenticate('local', {successRedirect:'/', failureRedirect:'/users/login',failureFlash: true}
  function(req, res) {
    req.flash('userinfo',req.user.username);

    res.redirect('/');
  });

router.get('/logout', function(req, res){
  req.logout();

  req.flash('success_msg', 'You are logged out');

  res.redirect('/users/login');
});


module.exports = router;
```

General code for the book

```
var express = require('express');
var router = express.Router();
var User = require('../models/user');
var Book = require('../models/book');
const fileUpload = require('express-fileupload');
var AWS = require('ibm-cos-sdk');
var util = require('util');
var fs = require('fs')
const uuidv1 = require('uuid/v1');

var config = {
    endpoint: 's3-api.dal-us-geo.objectstorage.softlayer.net',
    apiKeyId: 't4YOTrcghfoTuvquMx1Bkg2uchGEC9pJ6mxQb8LisCO5',
    ibmAuthEndpoint: 'https://iam.ng.bluemix.net/oidc/token',
    serviceInstanceId: 'crn:v1:bluemix:public:cloud-object-storage:glob
};

var cos = new AWS.S3(config);
```

```
router.get('/', function(req, res){
  console.log("The username here is "+req.user)
  var isLoggedIn = false
  var menuBar;
  if(req.isAuthenticated()){
    //Get username info
    User.getUserInfoById(req.user, function(err, user) {
      console.log("Getting user by id: "+user.username)
      var username = user.username
      res.render('index',
      { userID : username }
      )
    });

  }
  else{
    res.render('index',
    { userID : false }
    )
  }

});

function ensureAuthenticated(req, res, next){
  if(req.isAuthenticated()){

    return next();
  } else {
    console.log("Yea we are redirecting man")
    //req.flash('error_msg','You are not logged in');
    res.redirect('/users/login');
  }
}
```

```
router.get('/profile', ensureAuthenticated, function(req, res){

  res.render('profile')
});

router.get('/upload', function(req, res){
  res.render('upload')
});
```

```
router.post('/upload', function(req, res) {
  if (!req.files)
    return res.status(400).send('No files were uploaded.');

  // The name of the input field (i.e. "sampleFile") is used to retrieve the uploaded file
  let sampleFile = req.files.userfile;

  var id = uuidv1();
  var newBook = {
   "_id": id,
   "title": req.files.userfile.name,
   "genre": "",
   "description": "",
   "views": 0,
   "rating": 0,
   "authorID": req.user
   }
   Book.createBook(newBook, function(err, user){
     if(err) throw err;
     console.log("ESKITTIT"+newBook);
   })

  //var test= fs.createReadStream('public/pdfs/Portfolio-Culminating Assignment Part 2.pdf')
  //uploadFile(req.files.userfile);
  console.log()

  // Use the mv() method to place the file somewhere on your server
    sampleFile.mv('public/pdfs/'+id+'.pdf', function(err) {
    if (err)
      return res.status(500).send(err);

    res.send('File uploaded!');
  });
});
```

```
function uploadFile(info){
  console.log('Creating object');
  return cos.putObject({
          Bucket: 'books',
          Key: info.name,
          Body: fs.readFileSync('public/pdfs/'+info.name),
          ContentType: 'application/pdf'
  }).promise();
}


module.exports = router;
```

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Book class

```
var bcrypt = require('bcryptjs');
var Cloudant = require('@cloudant/cloudant');
var me = '1f4f3453-d758-4393-a422-2010efd3d530-bluemix'; // Set this to your own account
var password = '28a1e839547250fe22c3e85e46c9f6200a26428ccd6fa95ade3778162b939779';
var cloudant = Cloudant({account:me, password:password});
var searchBook = cloudant.db.use('books')

var Book = module.exports

module.exports.createBook = function(newBook, callback){
  Cloudant({account:me, password:password}, function(er, cloudant) {
    if (er)
      return console.log('Error connecting to Cloudant account %s: %s', me, er.message)

        // specify the database we are going to use
       // and insert a document in it
       searchBook.insert(newBook, function(err, body, header) {
         if (err)
           return console.log('[book.insert] ', err.message)

         console.log('you have inserted the book info.')
         console.log(body)
       })
  })
}
```

```
module.exports.getBookByBookname = function(bookname, callback){
  searchBook.search('book', 'newSearch', {q:'bookname:'+bookname}, function(er, result) {
    if (er) {
      throw er;
    }
    console.log("Now getting book")
    if(result.rows.length>0){
      searchBook.get(result.rows[0].id, { revs_info: true }, function(err, data) {
        console.log(`Document contents:` + JSON.stringify(data));
        console.log("And the id is "+data._id)
        callback(null, data)
      });
    }
    else{
      callback(null,false)
    }
  });
}

module.exports.getBookById = function(id, callback){
  searchBook.get(id, { revs_info: true }, function(err, data) {
    if(err){
      callback(null,false)
    }
    else{
      console.log("We successfully searched and here is the id: "+data._id);
      console.log(`Document contents:` + JSON.stringify(data));
      callback(null, data._id)
    }
  });

}
```

```
module.exports.updateUserInfo = function(user, callback){
  searchuser.get(user._id, { revs_info: true }, function(err, data) {
    if(err){
      callback(null,false)
    }
    else{
      console.log("We successfully searched and here is the id: "+data._id);
      console.log(`Document contents:` + JSON.stringify(data));

      Cloudant({account:me, password:password}, function(er, cloudant) {
        if (er)
          return console.log('Error connecting to Cloudant account %s: %s', me, er.message)

            // specify the database we are going to use
          var users = cloudant.db.use('users')
          // and insert a document in it
          users.insert(newUser, function(err, body, header) {
            if (err)
              return console.log('[users.insert] ', err.message)

            console.log('you have inserted the user info.')
            console.log(body)
          })
      })
      callback(null, data)
    }
  });
}
```

```
module.exports.comparePassword = function(candidatePassword, hash, callback){
  bcrypt.compare(candidatePassword, hash, function(err, isMatch) {
      if(err) throw err;
      console.log("And the match is "+isMatch)
      callback(null, isMatch);
  });
}


module.exports.getUserInfoById = function(id, callback){
  searchuser.get(id, { revs_info: true }, function(err, data) {
    if(err){
      callback(null,false)
    }
    else{
      console.log("We successfully searched and here is the id: "+data._id);
      console.log(`Document contents:` + JSON.stringify(data));
      callback(null, data)
    }
  });
}
```

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Login Form Snippet

```
section#signUp.bg-primary
  form(method='post', action='/users/login')
    .container
      h1 Login
      hr
      label Username
      input.form-control(type='text', name='username', placeholder='Username')
      label Password
      input.form-control(type='password', name='password', placeholder='Password')
      label
        input(type='checkbox', checked='checked', name='remember', style='margin-bottom:15px')
        |  Remember me
      .clearfix
        button.signupbtn2(type='submit') Login
```

Register Snippet

```
section#signUp.bg-primary
  form(method='post', action='/users/register')
    .container
      h1 Sign Up
      p Please fill in this form to create an account.
      hr
      label(for='username')
        b Username
      input(type='text', placeholder='Enter Username', name='username', required='')
      label(for='fullname')
        b Full Name
      input(type='text', placeholder='Enter Full Name', name='name', required='')
      label(for='email')
        b Email
      input(type='text', placeholder='Enter Email', name='email', required='')
      label(for='psw')
        b Password
      input(type='password', placeholder='Password', name='password', required='')
      label(for='psw-repeat')
        b Re-Enter Password
      input(type='password', placeholder='Password', name='password2', required='')
      label
        input(type='checkbox', checked='checked', name='remember', style='margin-bottom:15px')
        |  Remember me
      .clearfix
        button.cancelbtn(type='button') Cancel
        button.signupbtn(type='submit') Sig
```