Sample Project Data CSC 7135

I have generated some sample data to be used for testing this class project. I have generated the data for three of the companies in the association. Please feel free to use extra data if you have already generated some.

The data needed is closely related to the database design; please feel free to extract and input only the fields that you consider important according to the way your database is created. For the resume or CV field, I have provided only basic general information about the employees, you can add additional information in case you need to adapt to your database.

Association:
ROCA.sa is an engineering association company located in 7556 Nicholson Dr, Baton Rouge LA 70803.

Companies:

- **0001 PDVSA 7834 Brightside Rd, LA 9890.**

Description:
PDVSA is a US$14.3 billion technology, engineering, construction and manufacturing and financial services conglomerate. It addresses critical needs in key sectors including infrastructure, construction, hydrocarbon, power, defense and aerospace. A strong, customer-focused approach, conformance to global HSE standards and the constant quest for top-class quality have enabled the Company to sustain leadership in its major lines of business for over 75 years. PDVSA was rated 58th Most Innovative Company by Forbes International, and 4th in the global list of 'green companies' in the industrial sector by Newsweek. A survey by a leading HR consultancy affirmed its reputation as a people-focused company, leading to the award for the 'Most Attractive Employer' in the industrial sector.

Employees
- Dani Rodriguez dani@hotmail.com 1654 Brightside Dr Baton Rouge LA 70820
  Education: Bachelor's in Computer Science, Master's Degree in Computer Science- Minor in Software Engineering, Ph.D in Computer Science.
  Skills: Object-Oriented JavaScript, CSS, HTML5, Web-based languages, React.JS

- Jose Rodriguez JD@yahoo.com 4532 Nicholson Dr Baton Rouge LA 70803
  Education: Bachelor's in Computer Engineering, Master's Degree in Computer Science- Minor in Software Engineering.
  Year of experience: 7 years.
  Skills: BigData technology, Hadoop, and Spark, Java, C++, REST and RPC.

- Sim Thapa ST@gmail.com 6734 Corporate Baton Rouge LA 70801
  Education: Bachelor's in Computer Science
  Skills: C#, XAML, Linq, SQL, ASP.NET, Xamarin, GIS, Mobile development.

- Santi Salas st@hotmail.com 5432 Nicholson Dr Covington LA 6756
  Education: Bachelor's in Computer Science and minor in Software Engineering.
  Experience of years: 15 years
  Skills: Typescript, ReactJS, GraphGL, python, Java.

- Denisse Saenz DS@yahoo.com 1423 Burbank Dr Gonzalez LA 5674
  Education: Bachelor's degree in Mechanical Engineering, Master's degree in Mechanical Engineering.
  Years of experience: 15 years
  Skills: Process simulation software (Aspen Suite) and hydraulic modeling software (AFTFathom)

Openings
- *Software Engineer - PDVSA ID 00011*
  Posted on 01/10/2020.
  Status: Open to applicants.
  Basic Qualifications
  • Master's Degree in Computer Science or related field
  • Expert knowledge of one of the following programming languages: Java, C and C++
  • 5+ years of hands on experience in software development, including design, implementation, debugging, and support, building scalable system software and/or Services
  • Experience working with REST and RPC service patterns and other client/server interaction models
  Preferred Qualifications
  • Master Degree or PhD in Computer Science, Computer Engineering or related field.
  • Experience with BigData technology e.g. Hadoop, and Spark
  • iOS and Android SDK experience
  • Track record of building and delivering mission critical, 24x7 production software systems
  • Deep understanding of distributed systems and web services technology
  • Strong at applying data structures, algorithms, and object-oriented design, to solve challenging problems

- *Senior Developer - PDVSA ID 00012*
  Posted on 03/10/2020.
  Status: Open to applicants.
  Basic Qualifications
  • Master's or Ph.D in Computer Science
  • Development, Maintenance, and Troubleshooting in Google Ad Manager (formerly DFP)
  • Development and Maintenance of Tools for enhanced trafficking, automation, and Creative previews
  • Develop, Debug next level Ad Products that serve on our any of our platforms, on- and off property
  • Collaborate with and execute major cross-platform executions as a team, or independently when needed

- Document knowledge and processes specific as it correlates to your work.
- Utilize strong interpersonal skills in working with numerous internal teams and expand personal and team knowledge of new and upcoming products.

Preferred Qualifications
- Ph.D degree preferred, or relevant experience
- A portfolio or links to previous work
- 7 years of experience working in a technical service environment preferably supporting mobile or web-based products
- Demonstrated creative problem-solving and strong analytical skills required
- Demonstrated mastery of Object-Oriented JavaScript, CSS and HTML5 is required
- Experience with Web-based languages, including React.JS and Angular
- Experience with Mobile App-based languages: MRAID is a requirement, Swift and Java are a plus
- Creative experience with Adobe Creative Cloud is a plus
- Working knowledge of Machine Learning & AI is a plus
- Working knowledge of Node.js, Grunt, Gulp, Git, WordPress, and Drupal is a plus
- Strong working knowledge with one or more Internet ad management or targeted marketing applications (e.g., GAM/DFP, 24/7 Real Media, OAS, FreeWheel)
- Demonstrated knowledge of the Programmatic Advertising landscape (Adform, AppNexus, Beeswax, and other DSPs)
- Rich Media Vendor technology experience (e.g., Sizmek, Celtra, Pointroll)
- A passion for creative technology and new media capabilities for advertising
- Ability to absorb complex technical concepts and communicate them to a non-technical audience
- Strong creative, collaboration and communication skills

- *Software developer - PDVSA 00013*
  Posted on 01/18/2020.
  Status: Open to applicants.
  Basic Qualifications
  - Bachelor in Computer Science
  - 2-8 years of experience.
  - Good knowledge of C#, XAML, Linq, SQL.
  Preferred Qualifications
  - Knowledge of ASP.NET, Xamarin, GIS, Mobile development will be a bonus.
  - Good understanding of Software frameworks such as MVC and MVVM with be expected.
  - We work primarily in Microsoft UWP and MVC environment. Therefore, past experience with WPF, WebAPI, MVC will be required. Expert knowledge of Microsoft development tools is expected. Successfully completed projects in UWP, WPF or Xamarin will get bonus consideration. PS: If you have never worked with XAML, don't know what UWP or WPF is, this position will not be a fit.

- *Full Stack Software Engineer- PDVSA 00014*
  Posted on 03/06/2020.
  Status: Open to applicants.

<u>Basic Qualifications</u>
- Bachelor in Computer Science or Software Engineer related
- Strong knowledge using Typescript
- Strong experience in ReactJS
- Proficiency in the use of git for source code management
- Strong innovation skills and ability to solve computational problems
- Some experience working with a Designers Team
- Some knowledge of graphQL
- Some experience testing big web applications • Communicate clearly and effectively
- Experience working on a team and collaborating to achieve a shared goal
- Some experience with Agile processes and methods

<u>Preferred Qualifications</u>
- Experience in Continuous Delivery and DevOps
- Knowledge in Test-Driven Development
- Experience with containers and container technology such as Docker or Kubernetes
- Some knowledge of microservice architecture and developing for the cloud
- Some experience in high level scripting/programming languages like python, Java or go

- **0002 Petrobras 2123 Highland Rd, LA 1237.**

Description

Petrobras have been in operation since 2011, covering all aspects of work in the area of Mechanical installations including Plumbing services, Air conditioning, Ventilation and BMS systems. During this time Petrobras services have become specialists in planned preventative maintenance as well as installations. Our success is based on the continuous commitment that Alpha Mechanical services give to all our clients by continuously updating and developing our services, and importantly, in this time of rising costs – competitive pricing structure. Our consistency of work quality, experienced mechanical & electrical engineers, fast reliable 24 hour call out service, and preventative maintenance have also contributed towards the success to date of our company. We are committed to Health & Safety and all engineers are completely trained in this area. We also use an external company to monitor and audit our Health and safety practices.

Employees

- Daniel Rodriguez daniel@hotmail.com 1654 Brightside Dr Baton Rouge LA 70820
  Education: Bachelor's in civil engineering.
  Years of experience: 10 years.
  Skills: ASCE 7, AISC Steel Construction Manual, AISC 360, ACI 318, IBC, NFPA Life Safety Code, OSHA laws & regulations.

- Sebastian Rodriguez SRodriguez@yahoo.com 4532 Nicholson Dr Baton Rouge La 70803
  Education: Bachelor's Computer Engineering minor in Software Engineering.
  Years of experience: 15 years.
  Skills: Agile/SCRUM, scaled agile or similar methodologies, Strong leadership, project management, time management, and problem-solving skills, OOP, systems architecture, Java and related frameworks, modern JScript frameworks, microservices, relational and noSQL databases, CI/CD .

- Samuel Stephano SS@gmail.com 6734 Corporate Baton Rouge LA 70801
  Education: Bachelor's degree in Mechanical Engineering.
  Years of experience: 10 years.
  Skills: Process simulation software (Aspen Suite) and hydraulic modeling software (AFTFathom)

- Santiago Ortiz stortiz@hotmail.com 5432 Nicholson Dr Covington LA 67569
  Education: Bachelor's degree in Chemical Engineering
  Years of experience: 17 years.
  Skills : Project management.

- Julia Mata kt@yahoo.com 1423 Burbank Dr Gonzalez LA 5674
  Education: Bachelor's in Computer Engineering
  Years of experience: 10 years.
  Skills: BigData technology, Hadoop, and Spark, C++, Java.

- Manuel Caballero 7896 Gonzalez LA 5678
  Education: Bachelor's in Computer Engineering
  Year of experience: 20 years.
  Skills: BigData technology, Hadoop, and Spark.

- Paula Smith 7896 Lafayette, LA 7085
  Education: Bachelor's degree in Mechanical Engineering, Master's degree in Mechanical Engineering.
  Years of experience: 5 years
  Skills: Process simulation software (Aspen Suite) and hydraulic modeling software (AFTFathom)

Openings
- *Civil engineer (petrobras -00021)*
Posted on 01/10/2020.
Status: Open to applicants.
Basic Qualifications
• BS degree in civil engineering.
• 7+ years of structural engineering experience, preferably in a heavy industrial or similar field. Master's degree and PhD in civil engineering or related field can each be substituted for 1 year of experience.
• Working knowledge of structural analysis software, preferably RISA 3D Primary
Preferred Qualifications
• Intimate knowledge of all design codes related to design and construction of steel and concrete, including but not limited to ASCE 7, AISC Steel Construction Manual, AISC 360, ACI 318, IBC, NFPA Life Safety Code, and applicable OSHA laws & regulations.
• Ability to produce accurate engineering estimates, material takeoff estimates, and schedules.
• Ability to navigate and utilize 3D modeling and point cloud laser scan software.
• Ability to effectively lead and manage projects of various sizes and scope, ensuring that accurate, high quality deliverables are produced on schedule and on budget.
• Demonstrate effective communication and interpersonal skills, with the ability to lead a team, delegate tasks, coordinate with other disciplines, and relate with clients.
• Ability to effectively and efficiently mentor less experienced engineers and designers.

- *Director Engineering (petrobrass- 00022)*
The Director, Engineering ("the Director") will lead multiple product engineering teams within the Experience Management (XM) Engineering group and is responsible for managing and running the Analytics and Reporting Suite, Mobile and Web Applications.
Basic Qualifications
• Bachelor's degree in Computer Science or related field or equivalent work experience
• Minimum of 12 years of overall engineering experience including a minimum of 8 years of management and leadership experience
Preferred Qualifications
• Master's degree in Computer Science or related field.
• Expertise in software development using Agile/SCRUM, scaled agile or similar methodologies.

• Strong leadership, project management, time management, and problem-solving skills.
• Experience in creating and running bigdata and ML solutions.
• Expert level technical knowledge: OOP, systems architecture, Java and related frameworks, modern JScript frameworks, microservices, relational and noSQL databases, CI/CD (tools and processes).
• Hands on experience architecting and supporting highly scalable cloud-based solutions.
• Good knowledge of software algorithms and design patterns.
• Ability to communicate with non-engineering members of the management team, translating business requirements into engineering projects with specific requirements & scope, resources and project timing.
• Strong team leadership skills, including the ability to mentor, motivate, and influence others.
• Track record of hiring, developing and retaining strong teams.
• Occasional travel up to 30%
• Successful completion of a background screening process including, but not limited to, employment verifications, criminal search, OFAC, SS Verification, as well as credit and drug screening, where applicable and in accordance with federal and local regulations
• The ability to obtain the necessary credit line required to travel

- *Project Engineer (pretrobras 00023)*
Posted on 01/24/2020.
Status: Open to applicants.
Job Requirements Our client needs an Engineer with project management and experience in all project phases; Definition, Design, Procurement, Construction, and Start-up/Commissioning. In project execution this Project Manager will manage and lead 6-7 projects per year ranging from $200K to $2MM in scope.
Basic Qualifications
• Degree in engineering is required.
• Strong knowledge of process equipment and their functions.
• Knowledge of the different engineering discipline roles.
• Proficient in project management processes.
• Broad technical experience.
• Experience with problem solving / troubleshooting and data analysis.
• Ability to read P&ID's and instrument loops sheets.
• Experienced in commissioning of new projects within a chemical process.
• Experienced in troubleshooting process and control issues in a fast paced environment.
• Proficiency in Microsoft applications, such as Word and Excel.
• Strong written and verbal communication skills.
• Strong skill set in organization and prioritizing projects and work load.
• Must be a self-starter, who is highly motivated, able to take the initiative on projects, and able to work without supervision.
• Ability to follow processes and procedures, as well as develop and implement them.
• The position requires strong attention to detail, as well as the ability to sit in front of a computer.
• This position requires an employee to be in an office environment as well as exposed to some outside elements; process and warehouse environment.

Key Words: process engineer, chemical design engineer, chemical engineer, development engineer, controls engineer, instrumentation engineer, chemical engineering, process engineer, process control engineer, process development engineer, process controls engineer, instrumentation engineer, chemical engineering, process engineer, process control engineer, ChE, petrochemical, refinery, oil and gas, pharmaceutical, process plant, operations, maintenance

- *Process Engineer (pretrobras 00024)*
Posted on 01/12/2020.
Status: Open to applicants.
Responsible for performing all aspects of process design and development for various industries within the refining and specialty chemicals sectors.
Basic Qualifications
• Bachelor's Degree in Chemical, Petroleum, or Mechanical Engineering
• Minimum 3 years' applicable experience
• Familiarity with the Process simulation software (Aspen Suite) and hydraulic modeling software (AFTFathom), as well as proficiency with basic programs such as Microsoft Excel
Preferred Qualifications
• Job scoping as part of Front-End Process Development
• P&ID Generation and Revision
• Modeling and simulation of standard unit operations
• Calculation of line hydraulics to support equipment specification
• Generation and review of equipment spec sheets
• Relief valve screening and generation of calculation packages
• Familiarity with interpretation of RAGAGEP standards and procedures
• Quality assurance and checking of calculations made by other process team members
• Verification of Process Safety Information (P&IDs, Equipment and Instrument Data, etc.)
• Assistance with review of prior engineering calculations • Contacting of vendors for quotes or equipment information
• Ability to function in both supporting and lead process design roles as dictated by project needs
• Travel as needed for field work, project meetings, or training

- **0003 Ecopetrol 2342 Nicholson Dr, LA 70830.**

Description
Ecopetrol shares over half a century of industry-leading excellence with every client we meet. We offer general contracting, construction management, design-build, and preconstruction planning services for projects of all sizes—from a single office fit-up to water supply programs valued at over $300 million. Ecopetrol success over the years is due to its employees' dedication to excellent work, customer service that exceeds expectations, and a safety program that has led to millions of zero-accident hours. Honesty and open communication have empowered Ecopetrol's workforce since day one, and it shows in our work.

Employees
- Daniel Caraballo danielCaraba@hotmail.com 1654 Brightside Dr Baton Rouge LA 70820
  Education: Bachelor's in civil engineering.
  Years of experience: 10 years.
  Skills: design of structural steel and foundations for supporting equipment & pipe.

- Dahne D'alessandro Dalessa@yahoo.com 4532 Nicholson Dr Baton Rouge La 70803
  Education: Bachelor's in Mechanical engineering.
  Years of experience: 10 years.
  Skills: Project Management.

- Nathalie Stephano NS@gmail.com 6734 Corporate Baton Rouge LA 70801
  *Education:*Bachelor's in Mechanical engineering
  Years of experience: 5 years.
  Skills: Project Management.

- Mauricio Ortiz Mauortiz@hotmail.com 5432 Nicholson Dr Covington LA 6756
  *Education:*Bachelor's in Mechanical engineering
  Years of experience: 20 years.
  Skills: Project Management.

Openings
- *CIVIL ENGINEER - Baton Rouge, LA (Ecopetrol 00031)*
  Posted on 03/10/2020.
  Status: Open to applicants.
  Engineering firm seeking Civil Engineer for contract position onsite at client location.
  Basic Qualifications
  • BS in Civil Engineering.
  • 3-5 years experience in design of structural steel and foundations for supporting equipment & pipe, 1+ years project management experience, ability to coordinate with consulting engineering and construction contractors.
  Preferred Qualifications
  • Project Management experience

- *Mechanical engineering intern (Ecopetrol 00032)*
  Posted on 02/20/2020.
  Status: Open to applicants.
  <u>Basic Qualifications</u>
  • BS in Mechanical Engineering.
  • 3-5 years of experience.
  <u>Preferred Qualifications</u>
  • Position Summary Reporting directly to an assigned lead Engineer or Project Manager in an office or on a project construction work site, this is a temporary position providing on the job training. Duties provide meaningful work experience and business knowledge to college students in their chosen field.
  • Performs routine aspects of assigned projects under close supervision, following established procedures
  • Coordinate with Project Management professionals to make modifications and corrections to project specific documents
  • Prepare and process client requested data or documents that are compliant with contract terms and client specific needs
  • May use computer-assisted engineering software and equipment to perform engineering tasks
  • Collects and prepares data for evaluation
  • Examine Project documents for completeness and accuracy
  • Currently enrolled in a Mechanical Engineering curriculum is required
  • Experience with MS Word, MS Excel, and MS PowerPoint is required
  • Excellent communication and interpersonal skills is required
  • Attention to detail and the ability to exercise good professional judgment is required
  • Ability to effectively interact and collaborate with all levels of management regarding project activity is required