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| **Interviewer:** | | Ming Hsieh, Linus Hung | | | **Date of Interview:** | | Sep 16, 2020 (1 hour) | | |
| **Candidate Name:** | | Naufal Said | | | **Applied Position:** | | Enterprise Imaging Team, Junior Developer (SDE-1) | | |
| **Recommendation:** | | Fit position: , Not fit applied position but may fit others: , Reject | | | | | | | |
| **Overall:** Fit for position | | | | | | | | | |
| **Scale:** | **5** – Excellent | | **4** – Strong | **3** – Average | | **2** – Weak | | | **1** – None |
| **Technical Skills Questions/Assessment** | | | | | | | | **Rating** | |
| Q: given 1000 integers, from 1 to 1000  take each integer as input  if input is divided by 3 => print A  if input is divided by 5 => print B  for example  input 1: output: “”  input 2: output: “”  input 3: output: “A”  ......  input 15: output: “AB”  Note: This function should be handling more condition without modify the core function and make more generic and expendable.  **A:**  **public class Condition {**  **private boolean numberInRange(int lower, int upper, int input) {**  **if(input >= lower && input <= upper) return true;**  **return false;**  **}**  **private String dividedByNumber(int input) {**  **If (!numberInRange(0,1000, input)) return "number is not in range";**  **Map<Integer, Character> dict = new HashMap<>();**  **dict.put(3, 'A');**  **dict.put(5, 'B');**  **dict.put(7, 'C');**  **dict.put(11, 'D');**  **String result = "";**  **if (input == 1 || input == 2) { }**  **else {**  **for(Map.Entry<Integer, Character> o : dict.entrySet()) {**  **if(input % o.getKey() == 0) result = result + o.getValue();**  **}**  **}**  **return result;**  **}**  **public void processIntegerArray(int[] intArr) {**  **For (int i = 0; i < intArr.length; i++) {**  **System.out.println("Input: "+ intArr[i] +" Output: "+dividedByNumber(intArr[i]));**  **}**  **}**  **}**  **Assessment:**   |  |  | | --- | --- | | **Items** | **Rating**  **(1-5)** | | Generic/expendable | 3 |   **Comments**: The candidate has good practice to modularize his code and concept to use proper data structure for expendability. | | | | | | | | **3** | |
| **Q:**  Given an array with n integers in the range [0 – n-1], find a way to figure out if there is a duplicate number within the array.  **A:**  **public class IntegerDictionary {**  **Map<Integer, Integer> intDict = new HashMap<>();**  **public void FindDuplicateInArray(int[] input) {**  **for(int i = 0; i < input.length; i++) {**  **if(intDict.get(input[i]) == null) {**  **intDict.put(input[i], 1);**  **} else {**  **intDict.put(input[i],intDict.get(input[i])+1);**  **}**  **}**  **for(Map.Entry<Integer, Integer> o : intDict.entrySet()) {**  **if(o.getValue() > 1) {**  **System.out.println("There is duplicate in array");**  **return;**  **}**  **}**  **System.out.println("There is no duplicate in array");**  **}**  **}**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Check** | | Use of Collection | 3 | Avoid double for-loop | Ö |   **Comments**: The candidate can use proper (but not best) data structure to tackle this question | | | | | | | | **3** | |
| **Q: Tell me about your understanding of OOP principles?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | Encapsulation | 3 | Abstraction | 3 | | Inheritance | 3 | Polymorphism | 3 |   **Comments:**  Not too difficult same as c#. Object Oriented Programming inheritance – define parent extend subclass, encapsulation – access modifier, abstraction – common general variable don’t need to details, polymorphism – method can many forms overriding overloading | | | | | | | | **3** | |
| **Q: Have you ever used the Design Pattern before?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | Singleton | 3 | Factory | 3 | | MVC | 0 | Dependency Injection | 0 |   **Comments:**  Creational, structural , behavior  Singleton – is design only one instance in one runtime  Model object database View UI Controller bridge model and view | | | | | | | | **3** | |
| **Q: Tell me about a cloud development case?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | AWS | 0 | GCP | 0 | | Azure | 0 | Others | 0 |   **Comments:**  Azure – not the one who deployed | | | | | | | | **2** | |
| **Q: Which databases have you used? What statements do you use for CRUD?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | MySQL | 0 | PostgreSQL | 0 | | MSSQL | 0 | Others | 0 |   **Comments:**  Have experience with MariaDB. Create – insert, Read – select, update -update delete. Knows mongodb. | | | | | | | | **3** | |
| **Q: Have you used APIs before? Which requests map to CRUD?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | GET | 0 | POST | 0 | | DELETE | 0 | PUT | 0 |   **Comments:**  GET – read, post – create, put – update, delete | | | | | | | | **3** | |
| **Soft Skills Questions/Assessment** | | | | | | | | **Rating** | |
| **Topic: English communication**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | Verbal Discussion | 3 | Technical Discussion | 0 | | Listening | 3 | Concise and precise | 4 |   **Comments:** information system, naufal sa-id, software inhouse application, manufacturing honda, knowledge of the area, enterprise various stake holders, atiila GIS, LTD, besmart freelance GIS frontend angularjs javascript, java 80 / c# 20, spring boot 2, mariadb, ORM hibernate. Next job? | | | | | | | | 4 | |
| **Topic: Tell me a best teamwork example in your previous working experience? What tools did you use? Did you use pair programming?**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Rating**  **(1-5)** | **Items** | **Rating**  **(1-5)** | | Issue Tracking | 0 | Code Review | 2 | | Agile/Scrum | 3 | Version control | 3 |   **Comments**: atiila freelance 3 members, besmart – 10 members version control git only two people push master, dev branch, Jenkins continuous integration, document, use scrum, small task | | | | | | | | 3 | |
| **Topic: Can you describe an incident or disagreement with your team members? How did you resolve the issue?**  5 – Successfully resolved issue, everybody happy  4 – Resolved issue, one party not happy  3 – Resolved issue  2 – Did not resolve issue  1 – Did not occur  **Comment:**  Talk about it, coding standard. | | | | | | | | 3 | |
| **Topic: Positive Attitude**  **Assessment:**   |  |  |  |  | | --- | --- | --- | --- | | **Items** | **Check** | **Items** | **Check** | | Confidence |  | Cooperation | Ö | | Courtesy | Ö | Energy |  | | Enthusiasm | Ö | Friendliness |  | | Honesty |  | Humorous |  | | Patience |  | Respectfulness |  | | Hard-working |  |  |  |   **Comments**: xxx | | | | | | | | 3 | |