

**Submitted To:**

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**Subject:**

Web Engineering

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**Department:**

CS & IT Department

**Group Members:**

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| Mobile Hardware Ontology | | | | |
| SEEMP Reference Ontology Requirements Specification Document | | | | |
| **1** | **Purpose** | | | |
|  | The purpose of building the Reference Ontology is to provide a consensual knowledge model about the hardware specification of mobile. | | | |
| **2** | **Scope** | | | |
|  | The ontology has to focus just on the hardware specification of mobile. The level of granularity is directly related to the competency questions and terms identified. | | | |
| **3** | **Implementation Language** | | | |
|  | The ontology has to be implemented in OWL language. | | | |
| **4** | **Intended End-Users** | | | |
|  | User 1. Mature people looking for daily usage ease ability.  User 2. Researcher to gather information for different purposes.  User 3. Professional gamers interested about hardware specs. | | | |
| **5** | **Intended Uses** | | | |
|  | Use 1. For gaining knowledge about hardware.  Use 2. Gather information about hardware of mobile. | | | |
| **6** | **Ontology Requirements** | | | |
|  | **a. Non-Functional Requirements** | | | |
|  | NFR1. The ontology must support a multilingual scenario in the following languages: English, Spanish, Italian, and French.  NFR2. The ontology must be consistent should be able to answer all the competency questions.  NFR3. The ontology must satisfy FAIR (Findable, Accessible, Interoperable, Reusable) principle. | | | |
|  | **b. Functional Requirements: Groups of Competency Questions** | | | |
|  | Group 1: Body  CQ1. Enlist the materials that are used to make the body of mobile?  CQ2. Does All mobiles have same shape/dimension?  CQ3. Enlist the phones that are most slim in 2022?  CQ4. What is the dimension of Xiaomi Redmi Note 8 Pro?  CQ5. Name the mobile phones which has 71.2x151.7mm dimension?  CQ6. What is the weight of redmi note 8?  CQ7. Enlist the name of mobile phones having weight above 100g?  Group 2: Display  CQ1. What are the types of display in 2022?  CQ2. Which display is best for gaming phone?  CQ3. Enlist the names of mobile phone having gorilla glass?  CQ4. Which mobiles phones have oleophobic coating?  CQ5. Does Xiaomi Redmi Note 8 Pro has super Amoled display?  Group 3: Memory  CQ1. Which is the best Ram available till now?  CQ2. Enlist name of mobile phones that have 6GB Ram?  CQ3. Name the mobile phones having 128 GB memory in 2022?  CQ4. Which was the first mobile having 64GB memory?  CQ5. Which mobiles have the most memory till now?  CQ6. What is the Ram used in Xiaomi Redmi Note 8 Pro?  Group 4: CPU & GPU  CQ1. What are the types of processors that are used in mobile phones?  CQ2. Enlist the mobile phones having most GPU till now?  CQ3. Which smart phones have PowerVR GE8320 GPU?  CQ4. What are the different types of CPUs?  CQ5. Which type of CPU and GPU in Xiaomi Redmi Note 8 Pro?  CQ6. Which is the most common GPU used in 2020?  CQ7. Which is the best CPU available for android phones?  Group 5: Camera  CQ1. What type of cameras are used in mobile phones?  CQ2. Enlist the name of mobile phones having 13MP camera?  CQ3. Which was the first mobile that use triple camera in mobile phone?  CQ4. What are the highest MP cameras in 2022 in mobile phones?  CQ5. List the detail of Redmi note 8 pro cameras?  Group 6: Speakers  CQ1. What type of speakers are used in mobile phone?  CQ2. Name the Latest speaker type?  CQ3. Does Redmi note 8 pro has stereo speakers?  CQ4. Which type of speaker is used in oppo A54?  CQ5. Enlist the mobile phones having stereo speakers?  Group 7: Charging port  CQ1. What are the types of charging ports?  CQ2. Which is the fastest charging port A type or C type?  CQ3. Which mobile phones use type A charging port in 2022?  CQ4. What is the type of charging port of Redmi note 8 pro?  CQ5 which is the safest charging port till now?  CQ6. Enlist the name of mobile phones having C type port in 2016?  CQ7. Which mobile phone first use C type port?    Group 8: Sensors  CQ1. What are the different types of sensors used in mobile phones?  CQ2. Which finger print sensor is better front or back?  CQ3. Which smart phone has max sensors in 2022?  CQ4. Name the mobile phones having gyroscope sensor?  CQ5. Is gyroscope available in note 8 pro?  Group 9: Battery  CQ1. What are the different types of battery used in mobile phones?  CQ2. What is the battery timing of 5000mAh?  CQ3. What is the best battery capacity in 2022?  CQ3. How many hours does Redmi note 8 pro battery last?  CQ4. Enlist the name of mobile phones having 6000mAh battery? | | | |
| 7 | **Pre-Glossary of Terms** | | | |
|  | **Terms from Competency Questions** | | | |
|  | Structure  Display  RAM  CPU & GPU  BATTERY |  | SENSORS  CHARGING PORT  SPEAKERS  CAMERA |  |