

Architecture Characteristics Worksheet

System/Project: TAPAS

Architect/Team: Group 3 Date: 21.09.2021

Candidate Architecture Characteristics

responsiveness	data integrity	deployability
	data consistency	testability
recoverability	adaptability	abstraction
	extensibility	
elasticity		configurability
	concurrency	

others: _____

a

b

denotes characteristics that are related; some systems only need one of these, other systems may need both

Top 3 Driving Characteristics

<input checked="" type="checkbox"/>	<u>1. interoperability</u>	<u>feasibility (cost/time)</u>
<input checked="" type="checkbox"/>	<u>2. fault tolerance</u>	<u>security</u>
<input type="checkbox"/>	<u>3. scalability</u>	<u>maintainability</u>
<input type="checkbox"/>	<u>4. availability</u>	<u>simplicity</u>
<input checked="" type="checkbox"/>	<u>5. workflow</u>	
<input type="checkbox"/>	<u>6. performance</u>	
<input type="checkbox"/>	<u>7.</u>	

Implicit Characteristics

Others Considered

Instructions

- Identify no more than 7 driving characteristics.
- Pick the top 3 characteristics (in any order).
- Implicit characteristics can become driving characteristics if they are deemed *structural* concerns.
- Add additional characteristics identified that weren't deemed as important as the list of 7 to the *Others Considered* list.

Justifications

Interoperability	Unified communication with other auction houses is crucial for the execution of external tasks
Fault Tolerance	If a service fails, the system should keep running, such that either external or internal tasks can still be executed.
Scalability	Potentially growing number of users and tasks, which implies an unknown workload. Further the number of executors could also increase substantially.
Availability	As a central scheduling system the system is critical for all business functions and downtime would result in disturbances for the whole business.
Workflow	Critical that task are correctly assigned to executors and processed according to business rules (e.g. capabilities fulfilled) and further actually executed.
Performance	System will contain thousands of users and executors, which implies it needs to be fast enough to handle this load, while still providing good usability.