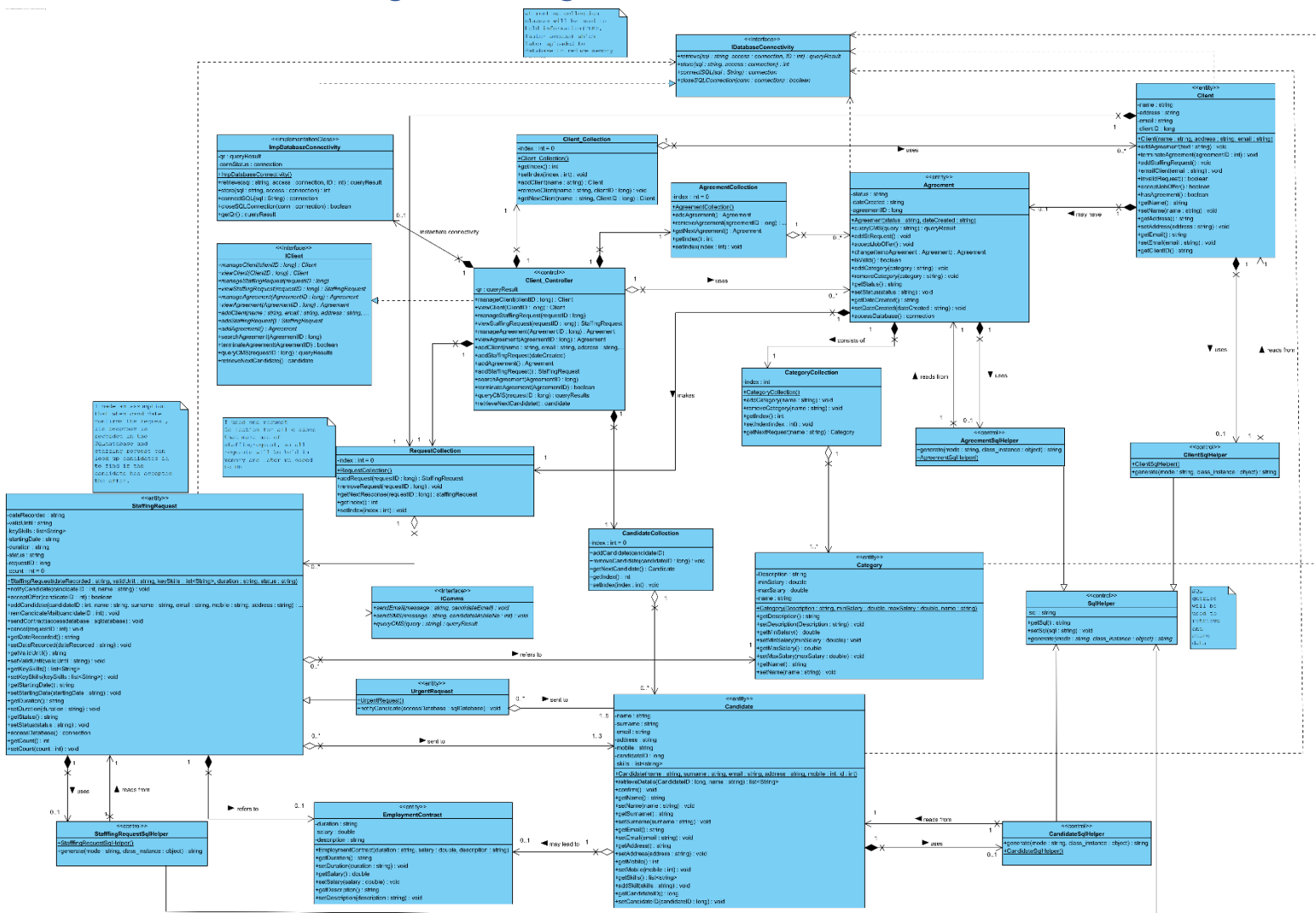


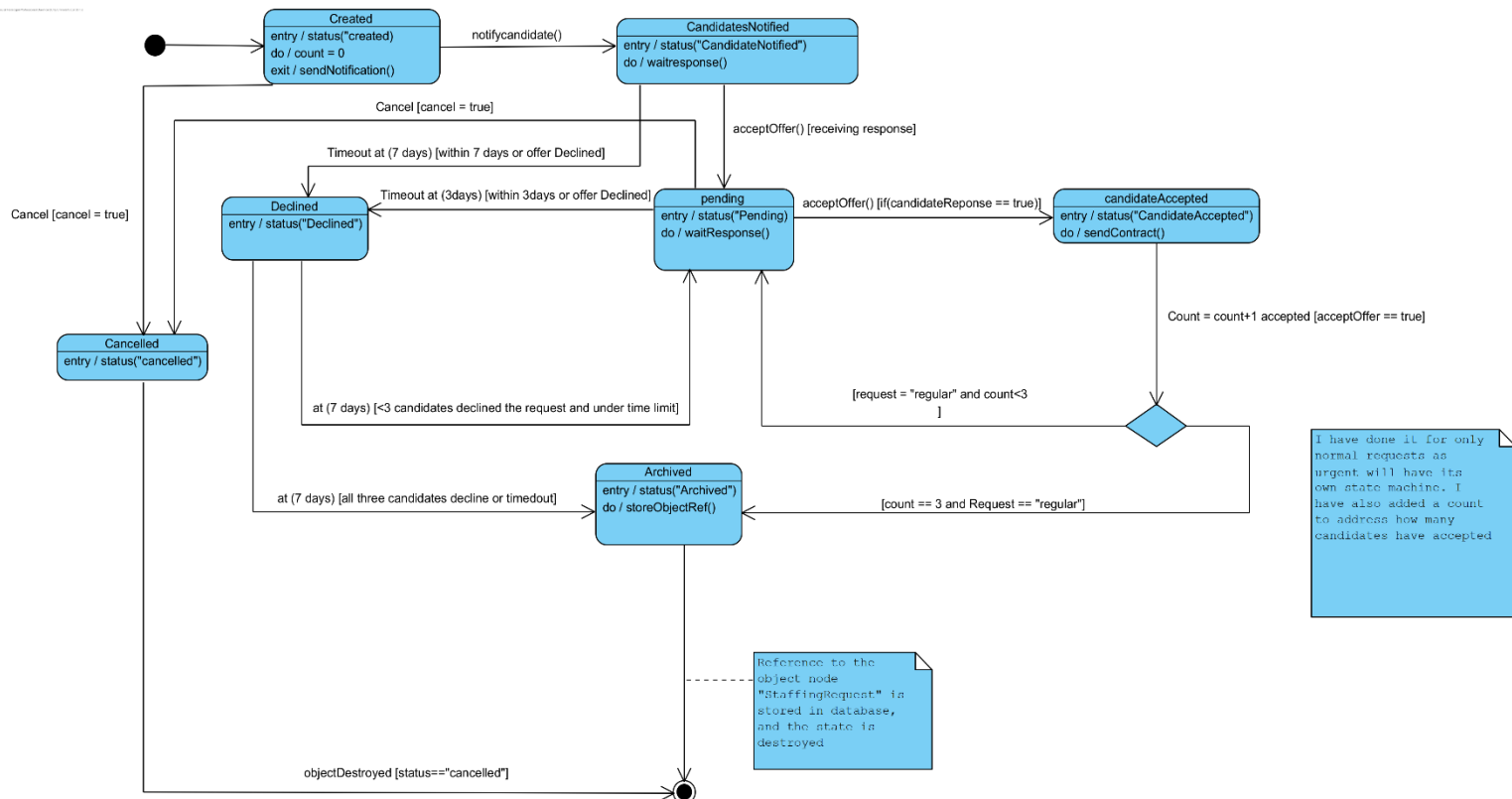
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pg. 2

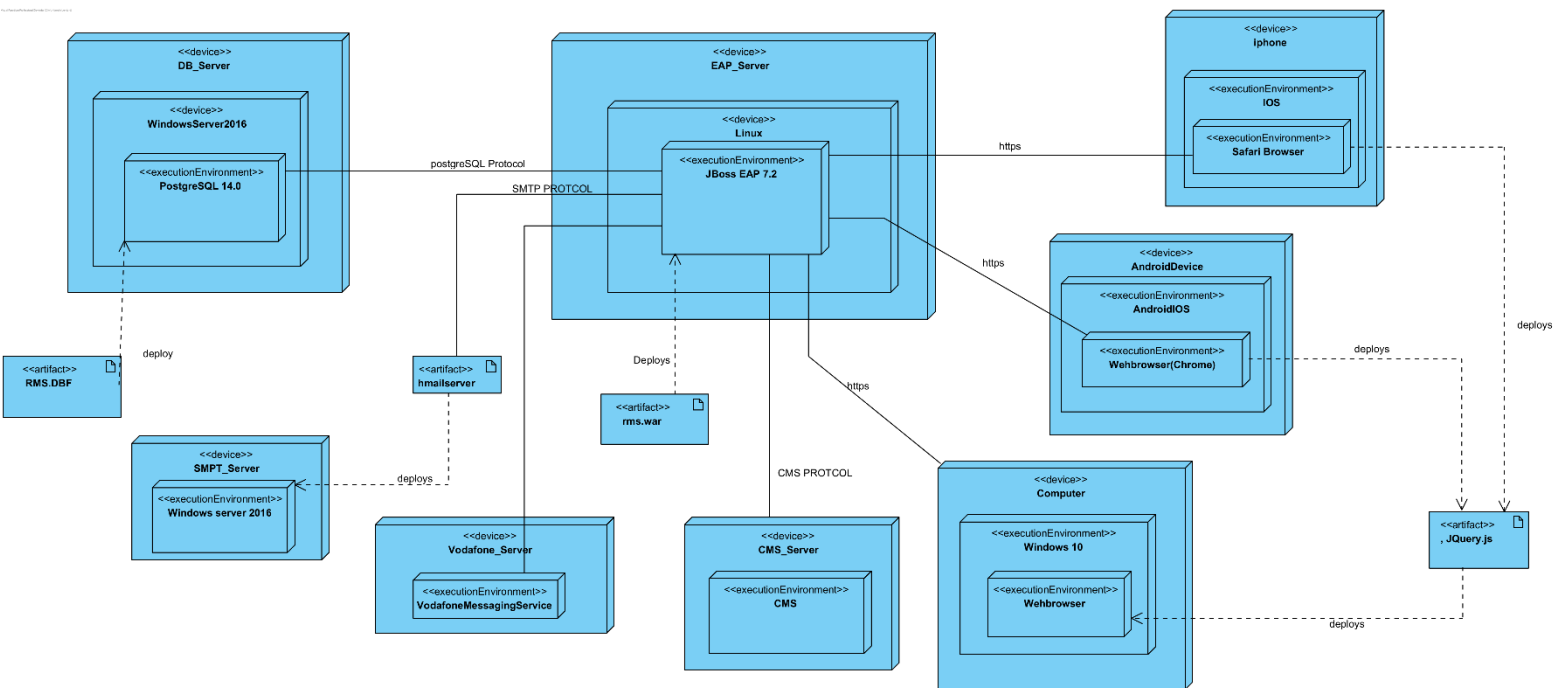


Question 2: State Machine



I was unsure if the client could cancel its request at pending stage, but I added it regardless as I made an assumption that the client could cancel the request at the pending stage.

Question 3: deployment Diagram



Question 4: Test Cases (4B specification)

Use case ID: TM01	Use case name: process Staffing Order(regular)
Test number: 1	
Objective: Test the main flow(regular)	
Set up (must make sure that all listed below is satisfied before the test): The RMS must be operational, and user must be logged in. The user finds out that an existing client has made a regular request for staff. The ID and name are provided (101, Davinder Singh). The user must ensure that request exists in the RMS database it must be searched with ID and ClientName. The user must confirm the agreement meets the standards and criteria of RMS and process it further	
Expected results: <ol style="list-style-type: none"> 1. The key skills required must be copied from request into CMS query and submit it to CMS 2. System must return the agreement which matches the search criteria 3. The CMS should return a list of suitable candidates with a matching score in descending order 4. System must determine if the request is urgent or regular 5. Email generated with job offer individualized for each candidate (retrieves email as well) 6. The system must select up to n items (Candidates) from top of list 7. The staffing request is 'regular' appropriate measure must be taken, top 3 candidates must be selected, and they must respond within 7 days. 8. System must place candidate record in the session variable 9. System must ensure staffing record is placed in the session variable. 10. New data must be added to database and staffing request must be stored 11. Client must be emailed that job has been offered to candidates and if suitable candidates are not found, client must be informed, and the request must be declined. 	
Test: <ol style="list-style-type: none"> 1. The user searches for agreement ID: 101 with name Davinder Singh 2. The system shows there is agreement with ID 101 and client name: Davinder Singh 3. The user confirms keys skills (proficient java developer and English) and ks must be copied into CMS query and submitted to CM. 4. The system returned a list of candidates sorted by their matching score. 5. The request is labelled as 'regular' 6. The system picked the top 3candidates with matching score and generated an individualised email (name, surname was inserted into email) 7. The system retrieved the top 3 candidate's email and sent an email 8. Checking the session there was a session for each candidate 	

9. Checking the session, staffing was recorded.	
Test record: The expected behavior observed.	
Date: 4/01/23	Tester: Davinder Singh
Result: Passed.	

Use case ID: TM01	Use case name: process Staffing Order(urgent)
Test number: 2	
Objective: Test the main flow(urgent)	
Set up (must make sure that all listed below is satisfied before the test): The RMS must be operational, and user must be logged in. The user finds out that an existing client has made a regular request for staff. The ID and name are provided (102, Jack Danny). The user must ensure that request exists in the RMS database it must be searched with ID and ClientName. The user must confirm the agreement meets the standards and criteria of RMS and process it further	
Expected results: <ol style="list-style-type: none"> 1. The key skills required must be copied from request into CMS query and submit it to CMS 2. System must return the agreement which matches the search criteria 3. The CMS should return a list of suitable candidates with a matching score in descending order 4. System must determine if the request is urgent or regular 5. Email generated with job offer individualized for each candidate (retrieves email as well) 6. The system must select up to n items (Candidates) from top of list 7. The staffing request is urgent appropriate measure must take, top 5 candidates must be selected, and they must respond within 3 days. 8. System must place candidate record in the session variable (session.Candidate) 9. System must ensure staffing record is placed in the session variable. (Session.Order) 10. New data must be added to database and staffing request must be stored 11. System creates a personalized SMS using session.candidate record 12. System sends an SMS to mobile number retrieved from session.candidate 13. The system removes session.candidate and session.resquest 14. Client must be emailed that job has been offered to candidates and if suitable candidates are not found, client must be informed, and the request must be declined. 15. 	
Test: <ol style="list-style-type: none"> 1. The user searches for agreement ID: 102 with name Jack Danny 2. The system shows there is agreement with ID 102 and client name: Jack Danny 3. The user confirms keys skills (Math and programming) and ks must be copied into CMS query and submitted to CM. 	

4. The system returned a list of candidates sorted by their matching score. 5. The request is labelled as 'urgent' 6. The system picked the top 5 candidates with matching score and generated an individualised email (name, surname was inserted into email)) 7. The system retrieved the top 5 candidate's email and number. The system successfully SMSed and emailed the candidates through mobile number and email address. 8. Session.candidate and session.request were successfully removed. to allow next candidate.	
Test record: The expected behavior observed.	
Date: 4/01/23	Tester: Davinder Singh
Result: Passed.	

Use case ID: TM01	Use case name: process Staffing Order
Test number: 3	
Objective: Test the alternative flow (Client Agreement not found)	
Set up (must make sure that all listed below is satisfied before the test): The RMS must be operational, and user must be logged in. The user finds out that an existing client has made a regular request for staff. The ID and name are provided (110, Logit Mev). The user must ensure that request exists in the RMS database it must be searched with ID and ClientName. The user must confirm the agreement meets the standards and criteria of RMS and process it further.	
Expected results: 1. The user starts the search. 2. The system is unable to find the specified agreement 3. The system does not record this request in data base and notifies the user. 4. The system discards it.	
Test: 1. The user searches for agreement ID: 103 with name John Max 2. The system notifies the user that no agreement matching the search criteria can be found 3. the request is not recorded and is discarded as no request was found according to criteria.	
Test record: The expected behavior observed.	
Date: 4/01/23	Tester: Davinder Singh
Result: Passed.	

Use case ID: TM01	Use case name: process Staffing Order
Test number: 4	
Objective: Test the alternative flow (no suitable candidate found)	
Set up (must make sure that all listed below is satisfied before the test): The RMS must be operational, and user must be logged in. The user finds out that an existing client has made a regular request for staff. The ID and name are provided (103, John Max). The user must ensure that request exists in the RMS database it must be searched with ID and ClientName. The user must confirm the agreement meets the standards and criteria of RMS and process it further.	
Expected results: <ol style="list-style-type: none"> 1. The key skills required must be copied from request into CMS query and submit it to CMS 2. System must return the agreement which matches the search criteria 3. The CMS returns a list of no suitable candidates 4. The system must notify the user 5. Client must be emailed that there are no candidates available. 	
Test: <ol style="list-style-type: none"> 4. The user searches for agreement ID: 103 with name John Max 5. The CMS returned an empty list of candidates suitable for staffing request 6. The system informed the user, no candidates located 7. System updated the status of the request to 'failed' 8. System successfully recorded staffing request. 9. System successfully sent an email to client about being unable to meet the staffing request. 	
Test record: The expected behavior observed.	
Date: 4/01/23	Tester: Davinder Singh
Result: Passed.	

Use case ID: TM01	Use case name: process Staffing Order
Test number: 5	
Objective: Test the alternative flow (invalid request)	
Set up (must make sure that all listed below is satisfied before the test): The RMS must be operational, and user must be logged in. The user finds out that an existing client has made a regular request for staff. The ID and name are provided (115, Billy Crane) with £1200 salary for biologist. The user must ensure that request exists in the RMS database it must be searched with ID and ClientName. The user must confirm the agreement meets the standards and criteria of RMS and process it further.	
Expected results: <ol style="list-style-type: none"> 1. The key skills required must be copied from request into CMS query and submit it to CMS 1. User provides category and price 2. The category and price listed are not in range of RMS and therefore the request is not processed further 3. System sets the staffing request to failed 4. Through SMTP server the client is informed that invalid request was made 	
Test: <ol style="list-style-type: none"> 1. The user searches for agreement ID: 103 with name John Max 2. The order parameters differed, salary range was £100-£10000 (expected 200-500) and category biology was not listed in categories. 3. the system allowed the user to choose an option 4. the request was labelled as 'invalid request' 5. the staffing request status was set to 'failed' 6. the system automatically sent an email to the client about being able to meet the staffing request. 	
Test record: The expected behavior observed.	
Date: 4/01/23	Tester: Davinder Singh
Result: Passed.	

