



**DALHOUSIE
UNIVERSITY**

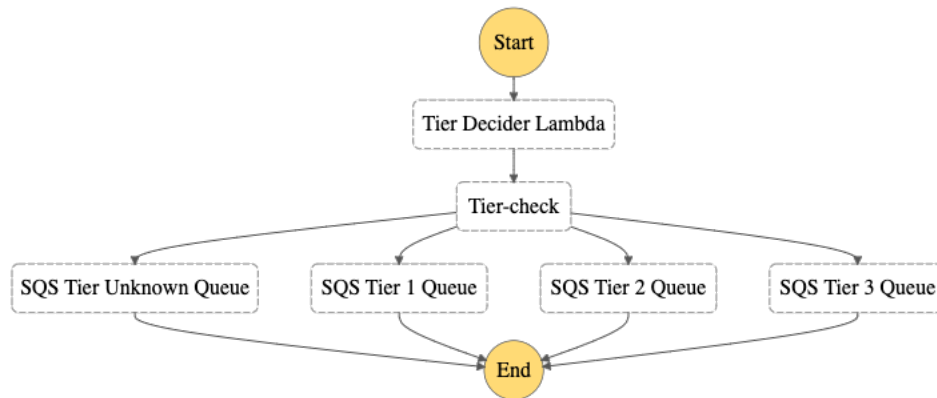
CSCI 5409 – Cloud Computing

Assignment – 4

Prashit Patel - B00896717

Screenshots:

Step Function



SQS Queues

Amazon SQS > Queues

Queues (4) Refresh Edit Delete Send and receive messages Actions Create queue

	Name ▲	Type ▼	Created ▼	Messages available ▼	Messages in flight ▼	Encryption ▼	Content-based deduplication ▼
<input type="radio"/>	Tier1-SQS-Queue	Standard	4/8/2022, 20:23:38 ADT	4	0	Disabled	-
<input type="radio"/>	Tier2-SQS-Queue	Standard	4/8/2022, 20:24:05 ADT	8	0	Disabled	-
<input type="radio"/>	Tier3-SQS-Queue	Standard	4/8/2022, 20:28:48 ADT	2	0	Disabled	-
<input type="radio"/>	TierUnknown-SQS-Queue	Standard	4/8/2022, 20:29:44 ADT	1	0	Disabled	-

Tier 1 Execution

DetailsExecution inputExecution outputDefinition

```
1 {
2   "email": "person@dal.ca",
3   "message": "I do not remember my password! Please help!"
4 }
```

Graph inspector

Data flow simulatorExportLayout

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```
graph TD
    Start((Start)) --> Lambda[Tier Decider Lambda]
    Lambda --> Check[Tier-check]
    Check --> Unknown[SQS Tier Unknown Queue]
    Check --> Tier1[SQS Tier 1 Queue]
    Check --> Tier2[SQS Tier 2 Queue]
    Check --> Tier3[SQS Tier 3 Queue]
    Unknown --> End((End))
    Tier1 --> End
    Tier2 --> End
    Tier3 --> End
```

DetailsStep inputStep output

```
1 {
2   "email": "person@dal.ca",
3   "message": "I do not remember my password! Please help!",
4   "tier": "tier1"
5 }
```

Queue 1

Message: b54c6c88-0def-4aaa-84a0-fe1b4edcd9d3

DetailsBodyAttributes

```
{"message": "I do not remember my password! Please help!", "email": "person@dal.ca"}
```

Done

4/8/2022, 21:26:17 ADT

41 bytes

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Tier 2 Execution

DetailsExecution inputExecution outputDefinition

```
1 {
2   "email": "person@dal.ca",
3   "message": "My laptop computer broke and I cannot use my printer! Please help!"
4 }
```

Graph inspector

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```
graph TD
    Start((Start)) --> Lambda[Tier Decider Lambda]
    Lambda --> Check[Tier-check]
    Check --> Queue2[SQS Tier 2 Queue]
    Queue2 --> End((End))
```

DetailsStep inputStep output

```
1 {
2   "email": "person@dal.ca",
3   "message": "My laptop computer broke and I cannot use my printer! Please help!",
4   "tier": "tier2"
5 }
```

Queue 2

Message: 11c8741c-fb50-4e7d-a6e7-9aa97e3c3943

DetailsBodyAttributes

```
{"message": "My laptop computer broke and I cannot use my printer! Please help!", "email": "person@dal.ca"}
```

Done

Tier 3 Execution

DetailsExecution inputExecution outputDefinition

```
1 {
2   "email": "rhawkey@dal.ca",
3   "message": "I do not remember my password! Please help!"
4 }
```

Graph inspector

Data flow simulatorExportLayout

DetailsStep inputStep output

```
1 {
2   "email": "rhawkey@dal.ca",
3   "message": "I do not remember my password! Please help!",
4   "tier": "tier3"
5 }
```

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```
graph TD
    Start((Start)) --> Lambda[Tier Decider Lambda]
    Lambda --> Check[Tier-check]
    Check --> Unknown[SQS Tier Unknown Queue]
    Check --> Tier1[SQS Tier 1 Queue]
    Check --> Tier2[SQS Tier 2 Queue]
    Check --> Tier3[SQS Tier 3 Queue]
    Unknown --> End((End))
    Tier1 --> End
    Tier2 --> End
    Tier3 --> End
```

In ProgressSucceededFailedCancelledCaught Error

Queue 3

Message: 691d9e38-e040-4d72-9134-701503669a1f

DetailsBodyAttributes

```
{"message": "I do not remember my password! Please help!", "email": "rhawkey@dal.ca"}
```

Done

Unknown Execution

DetailsExecution inputExecution outputDefinition

```
1 {
2   "email": "person@dal.ca",
3   "message": "The registrar system is down! Please help!"
4 }
```

Graph inspector

Data flow simulatorExportLayout

DetailsStep inputStep output

```
1 {
2   "email": "person@dal.ca",
3   "message": "The registrar system is down! Please help!",
4   "tier": "unknown"
5 }
```

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```
graph TD
    Start((Start)) --> TierDecider[Tier Decider Lambda]
    TierDecider --> TierCheck[Tier-check]
    TierCheck --> SQSTier1[SQS Tier 1 Queue]
    TierCheck --> SQSTier2[SQS Tier 2 Queue]
    TierCheck --> SQSTier3[SQS Tier 3 Queue]
    TierCheck --> SQSTierUnknown[SQS Tier Unknown Queue]
    SQSTier1 --> End((End))
    SQSTier2 --> End
    SQSTier3 --> End
    SQSTierUnknown --> End
```

In ProgressSucceededFailedCancelledCaught Error

Unknown Queue

Message: 97ed3edb-5c33-4c1a-aa65-f8424792bc63

DetailsBodyAttributes

```
{"message": "The registrar system is down! Please help!", "email": "person@dal.ca"}
```

Done

2-b171-4/8/2022, 21:49:12 ADT41 bytes2