



UNIVERSITÀ  
DEGLI STUDI  
DI BERGAMO

# MyTEDx

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Filippo Barbieri - 1054060  
Francesco Satriani - 1051361  
Andrea Uberti - 1052992

# Lambda Function



AWS Lambda

La lambda function implementata ha lo scopo di ricevere in ingresso l'id di un video e di cercare i relativi watch next. Per far ciò abbiamo creato la funzione Get\_Watch\_Next\_by\_Id in AWS utilizzando il linguaggio Node.js.

- La funzione 'lookup' effettua un inner join sulla collezione tedz\_wn, per ottenere le informazioni sui watch next.
- La funzione 'match' permette di selezionare il talk ricercato dall'utente.
- La funzione 'project' seleziona solo i campi desiderati di ogni record.

```
connect_to_db().then(() => {
  console.log('=> get_all talks');
  talk.aggregate([
    {
      "$lookup":{
        from: 'tedz_wn',
        localField: 'watch_next',
        foreignField: 'url',
        as: 'watch_next'
      }
    },
    {
      "$match":{
        _id:body.id
      }
    },
    {
      "$project":{
        _id:1,
        watch_next:1
      }
    }
  ])
  .then(talks => {
    callback(null, {
      statusCode: 200,
      body: JSON.stringify(talks)
    })
  })
  .catch(err =>
    callback(null, {
      statusCode: err.statusCode || 500,
      headers: { 'Content-Type': 'text/plain' },
      body: 'Could not fetch the talks.'
    })
  );
});
```

# Risultato

Richiesta via Postman

```
{  
  "id": "b3072cd11f40eb57fd259555264476c6"  
}
```

Risposta

```
{  
  "_id": "b3072cd11f40eb57fd259555264476c6",  
  "watch_next": [  
    {  
      "_id": "5be32167a2dcc08470287a6029b7e4c5",  
      "main_speaker": "Rabbi Lord Jonathan Sacks",  
      "title": "How we can navigate the coronavirus pandemic with courage and hope",  
      "details": "Rabbi Lord Jonathan Sacks offers thoughts on how we can navigate the coronavirus pandemic with courage, hope and empathy. With wisdom and clarity, he speaks on leadership, fear, death, hope and how we could use this moment to build a more just world. Watch for a special, impromptu prayer about halfway through the conversation. (This virtual conversation is part of the TED Connects series, hosted by head of TED Chris Anderson and head of curation Helen Walters. Recorded March 30, 2020)",  
      "posted": "Posted Mar 2020",  
      "url": "https://www.ted.com/talks/rabbi_lord_jonathan_sacks_how_we_can_navigate_the_coronavirus_pandemic_with_courage_and_hope",  
    }  
  ]  
}
```

id richiesto dall'utente

Informazioni dei talk watch next

# e ancora...

```
"tags": [  
  "TED",  
  "talks",  
  "community",  
  "social change",  
  "humanity",  
  "coronavirus",  
  "pandemic",  
  "politics",  
  "global issues",  
  "religion",  
  "future",  
  "TED Connects",  
  "society",  
  "family"  
],  
"watch_next": [  
  "https://www.ted.com/talks/  
    rabbi_lord_jonathan_sacks_how_we_can_face_the_future_without_fear_together",  
  "https://www.ted.com/talks/priya_parker_how_to_create_meaningful_connections_while_apart",  
  "https://www.ted.com/session/new?context=ted.www%2Fwatch-later",  
  "https://www.ted.com/talks/karen_armstrong_my_wish_the_charter_for_compassion",  
  "https://www.ted.com/talks/sharon_brous_it_s_time_to_reclaim_religion",  
  "https://www.ted.com/talks/alain_de_botton_atheism_2_0",  
  "https://www.ted.com/talks/bill_gates_how_we_must_respond_to_the_coronavirus_pandemic"
```

# ...e così per tutti i watch next

```
"_id": "cc20b7b4de317a6f4059bd6feb079334",
"main_speaker": "Susan David",
"title": "How to be your best self in times of crisis",
"details": "\"Life's beauty is inseparable from its fragility,\" says psychologist Susan David. In a special virtual conversation, she shares wisdom on how to build resilience, courage and joy in the midst of the coronavirus pandemic. Responding to listeners' questions from across the globe, she offers ways to talk to your children about their emotions, keep focus during the crisis and help those working on the front lines. (This virtual conversation is part of the TED Connects series, hosted by head of TED Chris Anderson and current affairs curator Whitney Pennington Rodgers. Recorded March 23, 2020)",
"posted": "Posted Mar 2020",
"url": "https://www.ted.com/talks/susan\_david\_how\_to\_be\_your\_best\_self\_in\_times\_of\_crisis",
"tags": [
  "TED",
  "talks",
  "emotions",
  "TED Connects",
  "personal growth",
  "communication",
  "motivation",
  "psychology",
  "happiness",
  "humanity",
  "virus",
```

# Utilizzo ed esperienza

```
"main_speaker": "Susan David",  
"title": "How to be your best self in times of crisis",  
"details": "\"Life's beauty is inseparable from its fragility,\" says psychologist Susan David. In a special virtual conversation, she shares wisdom on how to build resilience, courage and joy in the midst of the coronavirus pandemic. Responding to listeners' questions from across the globe, she offers ways to talk to your children about their emotions, keep focus during the crisis and help those working on the front lines. (This virtual conversation is part of the TED Connects series, hosted by head of TED Chris Anderson and current affairs curator Whitney Pennington Rodgers. Recorded March 23, 2020)",  
"posted": "Posted Mar 2020",  
"url": "https://www.ted.com/talks/susan_david_how_to_be_your_best_self_in_times_of_crisis",
```



La funzione verrà utilizzata alla fine di ogni video o quando richiesto dall'utente per mostrare i video correlati al talk selezionato.

In questo modo l'utente potrà selezionare l'url desiderato e vedere un prossimo video correlato al precedente.

# Criticità Tecniche

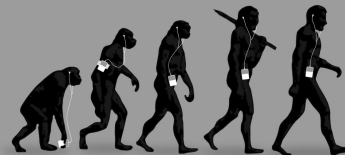
Difficoltà nel programmare utilizzando mongoose per node.js e nel ricercare eventuali errori di runtime, nonché tempi di attesa lunghi per ottenere le invocazioni recenti della funzione e poter accedere al LogStream.  
Elevata ridondanza dei dati nella risposta.





# Evoluzioni

Nelle prossime release dell'applicazione mostreremo a fianco degli url dei watch next solo informazioni limitate come ad esempio il titolo, il main speaker e la data di pubblicazione per ogni watch next. In questo modo facilitiamo l'utente a prendere una scelta su quale video guardare e a rendere l'interfaccia più pulita.



iVolution