

Universidad Nacional de Río Cuarto  
Facultad de ciencias exactas, físico-químicas y naturales.



# Ingeniería de Software

## Informe Primera Actividad

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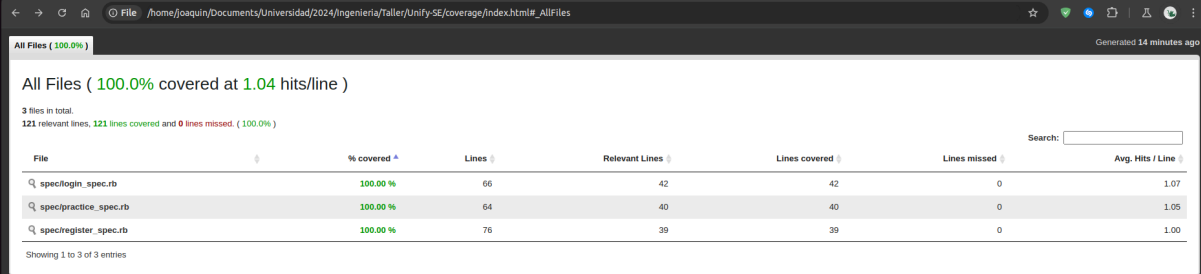
Río Cuarto - Córdoba  
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## Primera actividad del taller de Ingeniería de Software

Conformamos el siguiente informe pedido por la materia y los profesores, luego de haber conseguido pasar la mayor parte de las tecnologías anteriores hacia las tecnologías pedidas.

En este informe se solicita que, dadas las pruebas existentes del sistema, se pueda detallar la cobertura de las mismas, utilizando una gema del lenguaje de programación que ya realiza una breve descripción de las pruebas.

Al haber incluido las pruebas (hechas con la gema RSpec) y la gema solicitada (SimpleCov), el informe que arroja la gema se adjunta a continuación:



File	% covered	Lines	Relevant Lines	Lines covered	Lines missed	Avg. Hits / Line
spec/login_spec.rb	100.00 %	66	42	42	0	1.07
spec/practice_spec.rb	100.00 %	64	40	40	0	1.05
spec/register_spec.rb	100.00 %	76	39	39	0	1.00

[Link de la imagen](#)

Sean adjuntadas las pruebas que concluyen con éxito a continuación:

```
rs"), ["question_id", 30], ["LIMIT", 1]]
D, [2024-09-24 15:07:28.609856 #23009] DEBUG -- : TRANSACTION (0.0ms) SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.670042 #23009] DEBUG -- : Answer Create (0.2ms) INSERT INTO "answers" ("question_id", "option_id", "created_at", "updated_at") VALUES (?, ?, ?, ?) RETURNING "id" [{"question_id",
30}], [{"option_id", 118}], [{"created_at", "2024-09-24 18:07:28.669455"}, {"updated_at", "2024-09-24 18:07:28.669455"}]
D, [2024-09-24 15:07:28.670196 #23009] DEBUG -- : TRANSACTION (0.0ms) RELEASE SAVEPOINT active_record_1
<!-- 3 Ending saving answer -->
<!-- End Saving Questions -->
D, [2024-09-24 15:07:28.673782 #23009] DEBUG -- : TRANSACTION (0.1ms) rollback transaction
D, [2024-09-24 15:07:28.694971 #23009] DEBUG -- : TRANSACTION (0.1ms) begin transaction
D, [2024-09-24 15:07:28.695121 #23009] DEBUG -- : TRANSACTION (0.0ms) SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.695331 #23009] DEBUG -- : User Exists? (0.5ms) SELECT 1 AS one FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "testuser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.695827 #23009] DEBUG -- : User Create (0.2ms) INSERT INTO "users" ("username", "password", "created_at", "updated_at") VALUES (?, ?, ?, ?) RETURNING "id" [{"username", "testuser",
"}, {"password", "password"}, {"created_at", "2024-09-24 18:07:28.695927"}, {"updated_at", "2024-09-24 18:07:28.695927"}]
D, [2024-09-24 15:07:28.696027 #23009] DEBUG -- : TRANSACTION (0.0ms) RELEASE SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.701208 #23009] DEBUG -- : User Load (0.1ms) SELECT "users"."* FROM "users" WHERE "users"."username" = ? AND "users"."password" = ? LIMIT ? [{"username", "testuser"}, {"password",
"password"}, {"LIMIT", 1}]
User found: #<User id: 2>
D, [2024-09-24 15:07:28.716450 #23009] DEBUG -- : Document Load (0.1ms) SELECT "documents"."* FROM "documents" WHERE "documents"."file_hash" = ? LIMIT ? [{"file_hash", "2bc44e0808c04746668a311efc0075f",
54644e0808c04746668a311efc0075f"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.720715 #23009] DEBUG -- : TRANSACTION (0.1ms) SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.721136 #23009] DEBUG -- : Document Create (0.5ms) INSERT INTO "documents" ("filename", "filecontent", "file_hash", "uploaddate", "created_at", "updated_at") VALUES (?, ?, ?, ?, ?, ?)
RETURNING "id" [{"filename", "invalid_sample.pdf"}, {"filecontent", "4917 bytes of binary data"}, {"file_hash", "2bc44e0808c04746668a311efc0075f54644e0808c04746668a311efc0075f"}, {"uploaddate", "2
024-09-24"}, {"created_at", "2024-09-24 18:07:28.719714"}, {"updated_at", "2024-09-24 18:07:28.719714"}]
D, [2024-09-24 15:07:28.721524 #23009] DEBUG -- : TRANSACTION (0.1ms) RELEASE SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.730085 #23009] DEBUG -- : TRANSACTION (0.1ms) rollback transaction
D, [2024-09-24 15:07:28.731402 #23009] DEBUG -- : TRANSACTION (0.0ms) begin transaction
D, [2024-09-24 15:07:28.731598 #23009] DEBUG -- : User Load (0.2ms) SELECT "users"."* FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "newuser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.732180 #23009] DEBUG -- : User Load (0.1ms) SELECT "users"."* FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "newuser@example.com"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.732766 #23009] DEBUG -- : TRANSACTION (0.0ms) SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.732900 #23009] DEBUG -- : User Exists? (0.2ms) SELECT 1 AS one FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "newuser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.733591 #23009] DEBUG -- : User Exists? (0.1ms) SELECT 1 AS one FROM "users" WHERE "users"."email" = ? LIMIT ? [{"email", "newuser@example.com"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.734244 #23009] DEBUG -- : User Create (0.1ms) INSERT INTO "users" ("username", "email", "password", "created_at", "updated_at") VALUES (?, ?, ?, ?, ?) RETURNING "id" [{"username", "newuser",
"}, {"email", "newuser@example.com"}, {"password", "password"}, {"created_at", "2024-09-24 18:07:28.733689"}, {"updated_at", "2024-09-24 18:07:28.733689"}]
D, [2024-09-24 15:07:28.734456 #23009] DEBUG -- : TRANSACTION (0.0ms) RELEASE SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.735395 #23009] DEBUG -- : User Load (0.1ms) SELECT "users"."* FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "newuser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.741254 #23009] DEBUG -- : TRANSACTION (0.1ms) rollback transaction
D, [2024-09-24 15:07:28.746905 #23009] DEBUG -- : TRANSACTION (0.0ms) begin transaction
D, [2024-09-24 15:07:28.747042 #23009] DEBUG -- : TRANSACTION (0.0ms) SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.747237 #23009] DEBUG -- : User Exists? (0.6ms) SELECT 1 AS one FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "existinguser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.747621 #23009] DEBUG -- : User Exists? (0.1ms) SELECT 1 AS one FROM "users" WHERE "users"."email" = ? LIMIT ? [{"email", "existinguser@example.com"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.748188 #23009] DEBUG -- : User Create (0.1ms) INSERT INTO "users" ("username", "email", "password", "created_at", "updated_at") VALUES (?, ?, ?, ?, ?) RETURNING "id" [{"username",
"existinguser"}, {"email", "existinguser@example.com"}, {"password", "password"}, {"created_at", "2024-09-24 18:07:28.747698"}, {"updated_at", "2024-09-24 18:07:28.747698"}]
D, [2024-09-24 15:07:28.749376 #23009] DEBUG -- : TRANSACTION (0.0ms) RELEASE SAVEPOINT active_record_1
D, [2024-09-24 15:07:28.749204 #23009] DEBUG -- : User Load (0.0ms) SELECT "users"."* FROM "users" WHERE "users"."username" = ? LIMIT ? [{"username", "existinguser"}, {"LIMIT", 1}]
D, [2024-09-24 15:07:28.751811 #23009] DEBUG -- : TRANSACTION (0.1ms) rollback transaction

Finished in 14.1 seconds (files took 1.12 seconds to load)
10 examples, 0 failures

Coverage report generated for RSpec to /home/joaquin/Documents/Universidad/2024/Ingenieria/Taller/Unify-SE/coverage.
Line Coverage: 100.0% (121 / 121)
joaquin@joaquin-Moderrn-15-R-B13M: /Documents/Universidad/2024/Ingenieria/Taller/Unify-SE
```

[Link de la imagen](#)

Los tests incluídos están abarcando todos nuestros métodos Post y pasan correctamente (para ello verificar con `bundle exec rspec`).

Por el propio funcionamiento de la aplicación, es necesario contar con una api-key paga provista por OpenAI, por lo que si no se cuenta con una api-key, los tests que generan el cuestionario no van a pasar.

Así mismo, no conformes con esto, a medida que se implementen más métodos, pueden agregarse más pruebas para que tales métodos pasen los tests correspondientes.

Como mejoras constantes, siempre será posible agregar más pruebas a los métodos que ya existen porque sabemos que hay infinitos escenarios de pruebas. En las áreas abarcadas por los tests se contemplan pruebas sencillas y siempre serán posibles de mejorar.

Algunas implementaciones se modificaron para que se adecúen a los tests.

Concluimos este breve informe con observaciones básicas de la experiencia, que es que hacer las pruebas a medida que se migraba la tecnología no iba a ser posible, porque ya existía el desafío de la nueva tecnología en sí, además del desafío de hacer las pruebas. Es por eso que se decidió primero completar las implementaciones necesarias para luego realizar los tests sobre eso.

Además, el hecho de que el proyecto anterior tuviera los tests y pasaran correctamente en aquellas tecnologías, no significaba que las pudiéramos usar tal cuál estaban porque eran incompatibles.