

## Mermaid Diagrams

This example document uses the [pandoc Lua filter diagram](#) to generate Mermaid diagrams from embedded code blocks. [Mermaid](#) needs to be installed before the document can be rendered with the option `--lua-filter diagram.lua`.

### Entity Relationship Diagram

```
---
config:
  theme: neutral
---
erDiagram
    CAR ||--o{ NAMED-DRIVER : allows
    CAR {
        string registrationNumber PK
        string make
        string model
        string[] parts
    }
    PERSON ||--o{ NAMED-DRIVER : is
    PERSON {
        string driversLicense PK "The license #"
        string(99) firstName "Only 99 characters are allowed"
        string lastName
        string phone UK
        int age
    }
    NAMED-DRIVER {
        string carRegistrationNumber PK, FK
        string driverLicence PK, FK
    }
    MANUFACTURER only one to zero or more CAR : makes
```

### Sequence Diagram

The following sequence diagram omits a caption but uses the forest theme. A comprehensive overview of theming-related configuration options [can be found in the Mermaid documentation](#).

```
---
config:
```

```
theme: forest
---
sequenceDiagram
    participant web as Web Browser
    participant blog as Blog Service
    participant account as Account Service
    participant mail as Mail Service
    participant db as Storage

    Note over web,db: The user must be logged in to submit blog posts
    web->>+account: Logs in using credentials
    account->>db: Query stored accounts
    db->>account: Respond with query result

    alt Credentials not found
        account->>web: Invalid credentials
    else Credentials found
        account->>-web: Successfully logged in

        Note over web,db: When the user is authenticated, they can now
    ↪ submit new posts
        web->>+blog: Submit new post
        blog->>db: Store post data

        par Notifications
            blog-->mail: Send mail to blog subscribers
            blog-->db: Store in-site notifications
        and Response
            blog-->>-web: Successfully posted
        end
    end
end
```