User

-username: str
-password: str
-email: str

+login(username: str, password: str) : bool
+register(username: str, password: str, email: str) : bool

Ticket

-id: int
-title: str
-description: str
-status: str # 'open', 'active', 'closed'
-created_at: datetime.datetime
-modified_at: datetime.datetime
+reporter_id: int
+assignee_id: int

+update_status(new_status: str) : bool

Message

-id: int
-ticket_id: int
-sender_id: int
-receiver_id: int
-content: str
-timestamp: datetime.datetime

+send(content: str, receiver_id: int) : bool
+receive(ticket_id: int) : list[str]

DataVisualization

-tickets_data: dict

-users_data: dict
-metrics: dict

+fetch_tickets() : dict
+fetch_users() : dict
+generate_report() : str