**Pseudocode**

Create Customer Account

```

FUNCTION createCustomer(name, email, password)

IF customerExists(email) THEN

RETURN "email already exists"

ELSE

customer = NEW Customer(name, email, password)

SAVE customer TO customers

RETURN "Customer page"

END IF

END FUNCTION

FUNCTION customerExists(email)

customer = FIND Customer WHERE email = email FROM customers

IF customer IS NOT NULL THEN

RETURN TRUE

ELSE

RETURN FALSE

END IF

END FUNCTION

```

**Submit Support Request (Ticket)**

```

FUNCTION submitSupportRequest(issueDescription, customerId)

IF NOT customerExistsById(customerId) THEN

RETURN "Customer does not exist"

ELSE

ticket = NEW Ticket(issueDescription, 'open', CURRENT\_DATE, CURRENT\_DATE, customerId)

SAVE ticket TO tickets

RETURN "Support request submitted successfully"

END IF

END FUNCTION

FUNCTION customerExistsById(customerId)

customer = FIND Customer WHERE id = customerId FROM customers

IF customer IS NOT NULL THEN

RETURN TRUE

ELSE

RETURN FALSE

END IF

END FUNCTION

```

Schedule a Job

```

FUNCTION scheduleJob(jobName, ticketId)

job = NEW Job(jobName, 'scheduled', CURRENT\_DATE, CURRENT\_DATE, CURRENT\_DATE, ticketId)

SAVE job TO jobs

RETURN "Job page"

END IF

END FUNCTION

FUNCTION ticketExists(ticketId)

ticket = FIND Ticket WHERE id = ticketId FROM tickets

IF ticket IS NOT NULL THEN

RETURN TRUE

ELSE

RETURN FALSE

END IF

END FUNCTION

```

Manage Knowledge Base

```

Search Articles:

```

FUNCTION searchArticles(searchTerm)

articles = FIND Articles WHERE title CONTAINS searchTerm FROM knowledgebases

RETURN articles

END FUNCTION

```

View Article:

```

FUNCTION viewArticle(articleId)

article = FIND Article WHERE id = articleId FROM knowledgebases

IF article IS NOT NULL THEN

RETURN article

ELSE

RETURN "Article not found"

END IF

END FUNCTION

```

User Authentication

Login:

```

FUNCTION login(email, password)

customer = FIND Customer WHERE email = email AND password = password FROM customers

IF customer IS NOT NULL THEN

RETURN "Login successful"

ELSE

RETURN "Invalid email or password"

END IF

END FUNCTION

```

Forgot Password:

```

FUNCTION forgotPassword(email)

customer = FIND Customer WHERE email = email FROM customers

IF customer IS NOT NULL THEN

token = GENERATE\_RESET\_TOKEN()

SEND\_RESET\_EMAIL(customer.email, token)

RETURN "Password reset link sent to email"

ELSE

RETURN "Email not found"

END IF

END FUNCTION

FUNCTION GENERATE\_RESET\_TOKEN()

RETURN RANDOM\_STRING(64)

END FUNCTION

FUNCTION SEND\_RESET\_EMAIL(email, token)

SEND\_EMAIL(email, "Reset your password", "Use this token to reset your password: " + token)

END FUNCTION

```