**Trello API**

**Test Plan Identification**

* **Project Name:** Trello API Testing
* **Version:** 1.0
* **Test Lead:** Radwa sayed
* **Test Team:** Radwa sayed
* **Start Date:** 9/14/2024
* **End Date:** 10/13/2024

**Test Items**

* **API Endpoints:**

**Boards**

* **Create a board:** POST /boards
* **Get a board:** GET /boards/{boardId}
* **Update a board:** PUT /boards/{boardId}
* **Delete a board:** DELETE /boards/{boardId}
* **Get board members:** GET /boards/{boardId}/members
* **Invite a member to a board via email:** POST /boards/{boardId}/members/{memberId}
* **Remove a member from a board:** DELETE /boards/{boardId}/members/{memberId}

**Lists**

* **Create a list:** POST /boards/{boardId}/lists
* **Get a list:** GET /lists/{listId}
* **Update a list:** PUT /lists/{listId}
* **Archive all Cards in List:** Post/lists/{id}/archiveAllCards
* **Archive or unarchive a list:** PUT/lists/{id}/closed

**Cards**

* **Create a card:** POST /cards
* **Get a card:** GET /cards/{cardId}
* **Update a card:** PUT /cards/{cardId}
* **Delete a card:** DELETE /cards/{cardId}
* **Add an attachment to a card:** POST /cards/{cardId}/attachments
* **Create Checklist on a Card:** POST/cards/{id}/checklists

**Members**

* **Get a member:** GET /members/{memberId}
* **Create Star for Board:** POST/members/{id}/boardStars
* **Get a boardStar of Member:** GET/members/{id}/boardStars/{idStar}
* **Delete Star for Board:** DEL/members/{id}/boardStars/{idStar}

**Labels**

* **Create a label:** POST /boards/{boardId}/labels
* **Get a label:** GET /labels/{labelId}
* **Update a label:** PUT /labels/{labelId}
* **Delete a label:** DELETE /labels/{labelId}

**Search**

* **Search Trello:** GET/search
* **Search for Members:** GET/search/members/

**Notification**

* **Mark all Notifications as read:** POST/notifications/all/read
* **Features:**
  + **Boards**
    - Create, update, and delete boards
    - Add and remove members from boards
    - Manage board settings (e.g., privacy, background)
    - Get board members, lists, and cards
    - Search for boards
  + **Lists**
    - Create, update, and delete lists
    - Archive and unarchive lists
    - Move cards between lists
    - Get list cards
  + **Cards**
    - Create, update, and delete cards
    - Add and remove labels and attachments
    - Move cards between lists
    - Add checklists to cards
    - Comment on cards
  + **Members**
    - Get member information
    - Create stars for boards
    - Manage member permissions
  + **Labels**
    - Create, update, and delete labels
    - Assign and remove labels from cards
  + **Notifications**
    - Mark all notifications as read
* **Data:**
  + Test data for boards, lists, cards, members, labels, and attachments from the Trell API Documentation.

**Test Approach**

* **Testing Techniques:**
  + Functional testing
* **Testing Levels:**
  + functional
  + System testing

**Deliverables Test**

* **High level scenarios**
* **Test Scripts**
* **Test Results**
* **Defect Reports**
* **Test Summary Report**

**Test Environment**

* **Hardware:**
* **Software:** Postman, Trello API client, Windows 11, Intellijl .

**Responsibilities**

* **Test Lead:** Oversee the testing process, coordinate with stakeholders
* **Test Team:** Execute High level scenarios, report defects
* **Developers:** Address defects, provide necessary information

**Risks and Mitigation**

* **Risk 1:** API changes or updates
  + **Mitigation:** Regularly review API documentation and update test cases accordingly.
* **Risk 2:** Data integrity issues
  + **Mitigation:** Implement data validation and integrity checks in test cases.
* **Risk 3:** Performance bottlenecks
  + **Mitigation:** Conduct performance testing under various load conditions.