

模組 C – 影音播放平台

隨著網路的崛起，愈來愈多人會使用網路平台來看影片，你的目的是要設計一個影音播放平台，提供網站管理者以及個人用戶上傳影音內容，讓使用者以及訪客可以透過此平台瀏覽影音媒體。

在這個模組你必須完成平台的 API，以提供給平台串接。此系統必須使用 **Laravel** 進行撰寫，沒有使用此 **Framework** 本模組不予計分。

系統內建帳號：

| # | Email | 帳號 | 密碼 | 權限 |
|----|-----------------|-------|-----------|-----|
| 1. | admin@localhost | admin | adminpass | 管理員 |
| 2. | user1@localhost | user1 | user1pass | 使用者 |
| 3. | user2@localhost | user2 | user2pass | 使用者 |

C.1 – API 功能介紹：

1. 使用者

1. 可以登入系統
2. 可以登出系統
3. 可以查看推薦影片，推薦之標準如下：
 - A. 本周更新影集：在本周更新的影集的最新一集，每週的開始日為周日
 - B. 熱門影集：顯示在上周更新的影集中，累計觀看數量前 5 多的影集，以及其累計觀看數量
 - C. 各分類熱門公開影片：顯示各別分類前 3 日內(不含當日)觀看數量最多的影片，例如今日為 9/17 日，則顯示 9/14~9/16 日間每個分類觀看數量最多的前 4 隻公開影片
 - D. 最新影片：顯示最新的 4 支公開影片
4. 可以搜尋公開影片，每 10 筆一頁，依照上傳時間降冪排序：
 - A. 搜尋欄位為標題、描述與分類
 - B. 各搜尋關鍵字使用空白分離，如: hello world 為搜尋有包含 hello 與 world 的影片、影集
 - C. 請使用資料庫中的 FULLTEXT 索引進行搜尋
5. 可以查看有權限觀看的影片基本資訊，時間無條件捨去到整數位，有權限存取時，可以累計播放次數乙次
6. 可以在影片留言
7. 可以觀看影片中的留言，留言每 10 筆一頁，依照留言時間降冪排序，被禁止留言的使用者於懲罰期間無法留言，留言中的回覆依照回覆時間降冪排序
8. 可以回覆影片中的留言
9. 可以刪除自己影片中的留言及回覆
10. 可以刪除自己的留言及回覆
11. 可以在影片新增彈幕
12. 可以取得影片彈幕
13. 可以讚/取消讚一個影片
14. 當取得影片網址的 API 存取的影片屬於某個影集，且授權已過期的時候，可以回傳授權已過期
15. 可以管理自己的播放清單：

- A. 播放清單名稱，同個使用者的播放清單名稱不可重複
 - B. 影片不可重複被加入播放清單中
 - C. 當影片屬於影集時，若影集不在授權期間內，可以回傳影集未授權訊息
 - D. 當影片屬於私人影片，存取者非影片所有人時，可以回傳影片不存在訊息
 - E. 當影片不存在時，可以回傳影片不存在訊息
16. 可以搜尋授權期間內的影集，影集每 10 筆一頁，依照到期日升冪排序：
- A. 搜尋欄位為標題與描述
 - B. 各搜尋關鍵字使用空白分離，如: foo bar 為搜尋有包含 foo 與 bar 的影集
 - C. 請使用資料庫中的 FULLTEXT 索引進行搜尋
17. 可以取得會員基本資訊

2. 管理員

18. 可以進行一般會員的所有操作
19. 可以取得會員列表
20. 可以刪除影片中的留言及回覆並將該使用者禁言一段時間
21. 可以管理官方授權影集，影集包含以下功能：
 - A. 可以管理影集基本資訊：(1) 影集名稱、(2) 影集描述、(3) 影集授權起訖日（可以無到期日）
 - B. 可以將自己上傳的影片加入到影集中，並可設定集數與排序

C.2 — API 詳細敘述：

1. 當有錯誤發生時，以 401 Unauthorized 為例，response body 回傳格式為：

```
{  
  "success": false,  
  "message": "MSG_INVALID_TOKEN",  
  "data": ""  
}
```

2. 錯誤訊息：

| 訊息 | 狀態碼 | 適用 API & 情境 |
|-------------------------------|-----|--|
| MSG_INVALID_LOGIN | 403 | API:1 使用者不存在、帳密有誤 |
| MSG_PERMISSION_DENY | 403 | API:1,5,7,10,11,12,13,14,15,16,17,18,19,20,25,26,27,28,29,30 權限不足、會員已停用 |
| MSG_INVALID_TOKEN | 401 | API:2,7,10,12,13,14,15,16,17,18,19,20,25,26,27,28,29,30 無效的 TOKEN |
| MSG_MISSING_FIELD | 400 | API:10,12,15,17,18,26,28 缺少必要資料 |
| MSG_WRONG_DATA_TYPE | 400 | API:10,12,15,17,18,26,27,28 資料格式錯誤 |
| MSG_VIDEO_NOT_EXISTS | 404 | API:5,7,10,11,18,19,28,29 不存在的影片 |
| MSG_VIDEO_ALREADY_IN_PLAYLIST | 409 | API:17,28 影片已經存在於播放清單中 |
| MSG_COMMENT_NOT_EXISTS | 404 | API:12,13 不存在的留言 |
| MSG_DUPLICATED_PLAYLIST | 409 | API:15 重複的播放清單名稱 |
| MSG_PLAYLIST_NOT_EXISTS | 404 | API:16,17,18,19,20 不存在的播放清單 |
| MSG_WRONG_VIDEOS_LENGTH | 400 | API:18 欲排序的影片數量錯誤 |
| MSG_VIDEO_NOT_IN_PLAYLIST | 404 | API:19 影片不在播放清單中 |
| MSG_PROGRAM_NOT_EXISTS | 404 | API:22,27,28,29,30 不存在的影集 |
| MSG_VIDEO_NOT_IN_PROGRAM | 404 | API:29 影片不在影集中 |

3. 網址參數：
 - A. 頁數 page 為選填，若沒有則預設為第 1 頁
 - B. 刪除留言並禁言的 block 為選填，若未填則不用禁言
4. API 1 會回傳經過 sha256 hash 過的 email，用來作為 api 的驗證 token，token 為 hex 格式，全小寫。
5. API 2 會將使用者的 token 清空
6. 若無傳入使用者 token，則 liked 一律為 false
7. 請勿修改已提供的資料表的設計，若有需要可以新建立表格，但不可建立相似功能的資料表，如：已提供 users 表格紀錄會員資訊，就不可以自行建立 members 的資料表。
8. 請匯出資料庫的 SQL，存放於網站根目錄，檔名為 webXX_video_platform.sql，XX 為崗位編號。
9. 請將資料庫的架構圖儲存在網站根目錄，檔名為 webXX_video_platform_schema_diagram.png

C.3 — API Endpoints

| # | 功能 | Method | URL |
|-----|--------------|----------|---|
| 1. | 使用者登入 | [POST] | api/v1/login |
| 2. | 使用者登出 | [POST] | api/v1/logout |
| 3. | 查看推薦影片 | [GET] | api/v1/video/hot |
| 4. | 搜尋公開影片 | [GET] | api/v1/video/public/?q={keywords}&page={page} |
| 5. | 取得影片基本資訊 | [GET] | api/v1/video/{video_id} |
| 6. | 取得影片播放網址 | [GET] | api/v1/video/{video_id}/playurl?q={720 480 360} |
| 7. | 讚/取消讚 | [PUT] | api/v1/video/{video_id}/like |
| 8. | 新增彈幕 | [POST] | api/v1/video/{video_id}/danmu |
| 9. | 取得彈幕 | [GET] | api/v1/video/{video_id}/danmu |
| 10. | 新增留言 | [POST] | api/v1/video/{video_id}/comment |
| 11. | 取得影片留言及回覆 | [GET] | api/v1/video/{video_id}/comment?page={page} |
| 12. | 回覆留言 | [POST] | api/v1/comment/{comment_id}/reply |
| 13. | 刪除留言並禁言 | [DELETE] | api/v1/comment/{comment_id}?block={true false} |
| 14. | 取得播放清單列表 | [GET] | api/v1/playlist |
| 15. | 新增播放清單 | [POST] | api/v1/playlist |
| 16. | 取得播放清單內容 | [GET] | api/v1/playlist/{playlist_id} |
| 17. | 將影片加入播放清單 | [POST] | api/v1/playlist/{playlist_id} |
| 18. | 調整播放清單順序 | [PUT] | api/v1/playlist/{playlist_id}/order |
| 19. | 將影片從播放清單移除 | [DELETE] | api/v1/playlist/{playlist_id}/video/{video_id} |
| 20. | 刪除播放清單 | [DELETE] | api/v1/playlist/{playlist_id} |
| 21. | 搜尋授權期間內影集 | [GET] | api/v1/program?q={keywords}&page={page} |
| 22. | 取得影集基本資訊 | [GET] | api/v1/program/{program_id} |
| 23. | 取得 banner 網址 | [GET] | api/v1/index/banner |
| 24. | 取得會員基本資訊 | [GET] | api/v1/profile |
| 25. | 取得會員列表 | [GET] | api/v1/user |
| 26. | 新增影集 | [POST] | api/v1/program |
| 27. | 修改影集內容 | [PUT] | api/v1/program/{program_id} |
| 28. | 將影片加入影集 | [POST] | api/v1/program/{program_id}/video |
| 29. | 將影片從影集移除 | [DELETE] | api/v1/program/{program_id}/video/{video_id} |
| 30. | 刪除影集 | [DELETE] | api/v1/program/{program_id} |

C.4 – API 輸入 / 輸出規範及範例

1. 使用者登入 (POST , URL: api/v1/login)

| Request | Response |
|--|--|
| Accept: application/json | Content-Type: application/json |
| <pre>{ "email": "admin@localhost", "password": "adminpass" }</pre> | <pre>{ "success": true, "message": "", "data": "d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec6f6e9 6501eb7bde2073bf9d2" }</pre> |

2. 使用者登出 (POST , URL: api/v1/logout)

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | <pre>{ "success": true, "message": "", "data": "" }</pre> |

3. 查看推薦影片 (GET , URL: api/v1/video/hot)

| Request | Response |
|--------------------------|---|
| Accept: application/json | Content-Type: application/json |
| | <pre>{ "success": true, "message": "", "data": { "this_week_programs": [{ "id": 2, "title": "The Big Bang Theory", "description": "The Big Bang Theory is an American television sitcom created by Chuck Lorre and Bill Prady, both of whom served as executive producers on the series, along with Steven Molaro. All three also served as head writers. The show premiered on CBS on September 24, 2007 and concluded on May 16, 2019, having broadcast a total of 279 episodes over 12 seasons.", "authorized_start_datetime": "2019-09-03 11:16:35", "authorized_end_datetime": "2020-09-04 11:16:35", "updated_at": "2019-09-03 11:16:35", "last_ep": "第 12 集" }, { "id": 1, "title": "Friends", "description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.", "authorized_start_datetime": "2019-09-02 11:16:35", "authorized_end_datetime": "2020-09-03 11:16:35", "updated_at": "2019-09-02 11:16:35", "last_ep": "第 13 集" }], "hot_programs": [{ "id": 2, "title": "The Big Bang Theory", "description": "The Big Bang Theory is an American television sitcom created by Chuck Lorre and Bill Prady, both of whom served as executive producers on the series,</pre> |

along with Steven Molaro. All three also served as head writers. The show premiered on CBS on September 24, 2007 and concluded on May 16, 2019, having broadcast a total of 279 episodes over 12 seasons.",

"authorized_start_datetime": "2019-09-03 11:16:35",

"authorized_end_datetime": "2020-09-04 11:16:35",

"updated_at": "2019-09-03 11:16:35",

"last_ep": "第 12 集"

},

{

"id": 1,

"title": "Friends",

"description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.",

"authorized_start_datetime": "2019-09-02 11:16:35",

"authorized_end_datetime": "2020-09-03 11:16:35",

"updated_at": "2019-09-02 11:16:35",

"last_ep": "第 13.5 集"

},

{

"id": 3,

"title": "Friends4",

"description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.",

"authorized_start_datetime": "2019-09-02 11:16:35",

"authorized_end_datetime": "2020-09-03 11:16:35",

"updated_at": "2019-09-02 11:16:35",

"last_ep": "第 13.5 集"

},

{

"id": 4,

"title": "Friends2",

"description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.",

"authorized_start_datetime": "2019-09-02 11:16:35",

"authorized_end_datetime": "2020-09-03 11:16:35",

"updated_at": "2019-09-02 11:16:35",

```

        "last_ep": "中秋特別篇"
    },
    {
        "id": 5,
        "title": "Friends3",
        "description": "This hit sitcom
follows the merry misadventures of six 20-
something pals as they navigate the pitfalls
of work, life and love in 1990s Manhattan.",
        "authorized_start_datetime": "2019-
09-02 11:16:35",
        "authorized_end_datetime": "2020-09-
03 11:16:35",
        "updated_at": "2019-09-02 11:16:35",
        "last_ep": "SP1"
    }
],
"hot_videos": [
    {
        "category": "教育",
        "videos": []
    },
    {
        "category": "娛樂",
        "videos": [
            {
                "id": 1,
                "title": "Faded",
                "description": "You were the
shadow to my light Did you feel us Another
start You fade away Afraid our aim is out of
sight Wanna see us Alive",
                "duration": 213,
                "created_at": "2019-09-02
11:16:35",
                "user": "admin"
            },
            {
                "id": 2,
                "title": "中秋特別篇 1",
                "description": "You were the
shadow to my light Did you feel us Another
start You fade away Afraid our aim is out of
sight Wanna see us Alive",
                "duration": 213,
                "created_at": "2019-09-02
11:16:35",
                "category": "娛樂",
                "user": "user1"
            },
            {
                "id": 3,

```

```

        "title": "中秋特別篇 2",
        "description": "You were the
shadow to my light Did you feel us Another
start You fade away Afraid our aim is out of
sight Wanna see us Alive",
        "duration": 213,
        "created_at": "2019-09-02
11:16:35",
        "user": "user2"
    }
]
},
{
    "category": "體育",
    "videos": [
        {
            "id": 1,
            "title": "U12、U18 中華隊同年奪得世
界冠軍台灣史上第一次",
            "description": "",
            "duration": 213,
            "created_at": "2019-09-02
11:16:35",
            "user": "user1"
        }
    ]
}
],
"latest_videos": [
    {
        "id": 2,
        "title": "The Big Bang Theory",
        "description": "The Big Bang Theory
is an American television sitcom created by
Chuck Lorre and Bill Prady, both of whom
served as executive producers on the series,
along with Steven Molaro. All three also
served as head writers. The show premiered on
CBS on September 24, 2007 and concluded on May
16, 2019, having broadcast a total of 279
episodes over 12 seasons.",
        "authorized_start_datetime": "2019-
09-03 11:16:35",
        "authorized_end_datetime": "2020-09-
04 11:16:35",
        "updated_at": "2019-09-03 11:16:35"
    },
    {
        "id": 1,
        "title": "Friends",
        "description": "This hit sitcom
follows the merry misadventures of six 20-

```

| | |
|--|---|
| | <pre> something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.", "authorized_start_datetime": "2019- 09-02 11:16:35", "authorized_end_datetime": "2020-09- 03 11:16:35", "updated_at": "2019-09-02 11:16:35" }] } } </pre> |
|--|---|

4. 搜尋公開影片 (GET , URL: api/v1/video/public/?q={keywords}&page={page})

| Request | Response |
|--------------------------|--|
| Accept: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": { "total_count": 1, "results": [{ "id": 1, "title": "Faded", "description": "You were the shadow to my light Did you feel us Another start You fade away Afraid our aim is out of sight Wanna see us Alive", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "user": "admin" }] } } </pre> |

5. 取得影片基本資訊 (GET , URL: api/v1/video/{video_id})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | <pre> { "success": true, "message": "", </pre> |

| | |
|--|---|
| | <pre> "data": { "id": 1, "title": "Faded", "description": "You were the shadow to my light Did you feel us Another start You fade away Afraid our aim is out of sight Wanna see us Alive", "visibility": "PUBLIC", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "user": "user1", "plays": 100, "likes": 10, "liked": true, "program_id": null } </pre> |
|--|---|

6. 取得影片播放網址 (GET , URL: api/v1/video/{video_id}/playurl?q={720|480|360})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": { "video_id": 1, "width": 480, "height": 360, "file_path": "http://webXX.competitor.web.skill.tw/XX_Modul e_Y/video/MTWMC2Euya50vyFNSJJQ.mp4" } } </pre> |
| | <pre> { "success": false, "message": "QUALITY_NOT_EXISTS", "data": "" } </pre> |
| | <pre> { "success": false, "message": "VIDEO_NOT_EXISTS", "data": "" } </pre> |
| | <pre> { </pre> |

| | |
|--|---|
| | <pre> "success": false, "message": "PROGRAM_EXPIRED", "data": { "authorized_start_datetime": "2019-09-03 11:16:35", "authorized_end_datetime": "2019-09-14 11:16:35" } } </pre> |
| | <pre> { "success": false, "message": "PROGRAM_COMING_SOON", "data": { "authorized_start_datetime": "2019-10-03 11:16:35", "authorized_end_datetime": "2020-09-14 11:16:35" } } </pre> |

7. 讚/取消讚 (PUT , URL: api/v1/video/{video_id}/like)

| Request | Response |
|--|---|
| <pre> Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json </pre> | <pre> Content-Type: application/json </pre> |
| <pre> { "like": true, } </pre> | <pre> { "success": true, "message": "", "data": "" } </pre> |

8. 新增彈幕 (POST , URL: api/v1/video/{video_id}/danmu)

| Request | Response |
|--|---|
| <pre> Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json </pre> | <pre> Content-Type: application/json </pre> |
| <pre> { "text": "The movie is about to start!", "position": 5 } </pre> | <pre> { "success": true, "message": "", "data": "" } </pre> |

9. 取得彈幕 (GET , URL: api/v1/video/{video_id}/danmu)

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | <pre>{ "success": true, "message": "", "data": [{ "text": "頭香", "position": 1 }, { "text": "頭香", "position": 0 }, { "text": "完結灑花", "position": 700 }, { "text": "求續集", "position": 701 }] }</pre> |

10. 新增留言 (POST , URL: api/v1/video/{video_id}/comment)

| Request | Response |
|--|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| <pre>{ "text": "Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.", }</pre> | <pre>{ "success": true, "message": "", "data": "" }</pre> |

11. 取得影片留言及回覆 (GET , URL: api/v1/video/{video_id}/comment?page={page})

| Request | Response |
|---------|----------|
|---------|----------|

| | |
|--------------------------|--|
| Accept: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": { "total_count": 51, "results": [{ "user": "sysop", "text": "Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.", "created_at": "2019-09-02 11:16:35", "allow_delete": true, "allow_block": false, "replies": [{ "user": "sysop", "text": "Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.", "created_at": "2019-09-02 11:16:35", "allow_delete": true, "allow_block": false }, { "user": "user1", "text": "Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.", "created_at": "2019-09-02 11:15:35", "allow_delete": true, "allow_block": false }] }] } } </pre> |

12. 回覆留言 (POST , URL: api/v1/comment/{comment_id}/reply)

| Request | Response |
|---|--------------------------------|
| Accept: application/json X-User-Token: | Content-Type: application/json |

| | |
|--|--|
| d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | |
| { "text": "Reply comment text.", } | { "success": true, "message": "", "data": "" } |

13. 刪除留言並禁言 (DELETE , URL: api/v1/comment/{comment_id}?block={true|false})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": "" } |

14. 取得播放清單列表 (GET , URL: api/v1/playlist)

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": [{ "id": 1, "title": "Alan Walker" }, { "id": 2, "title": "OneRepublic" }] } |

15. 新增播放清單 (POST , URL: api/v1/playlist)

| Request | Response |
|---------|----------|
|---------|----------|

| | |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| { "title": "Alan Walker" } | { "success": true, "message": "", "data": 1 } |

16. 取得播放清單內容 (GET , URL: api/v1/playlist/{playlist_id})

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": { "id": 1, "title": "Alan Walker", "user": "admin", "videos": [{ "id": 1, "title": "Faded", "description": "You were the shadow to my light Did you feel us Another start You fade away Afraid our aim is out of sight Wanna see us Alive", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂" }, { "id": 2, "user_id": 2, "title": "Alone", "description": "Lost in your mind I wanna know Am I losing my mind? Never let me go", "duration": 200, "created_at": "2019-09-02 11:16:35", "category": "娛樂" }] } } |

| | |
|--|------------------------|
| | <pre> } } </pre> |
|--|------------------------|

17. 將影片加入播放清單 (POST , URL: api/v1/playlist/{playlist_id})

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| <pre> { "video_id": 1 } </pre> | <pre> { "success": true, "message": "", "data": "" } </pre> |

18. 調整播放清單順序 (PUT , URL: api/v1/playlist/{playlist_id}/order)

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| <pre> { "video_ids": [1, 3, 2] } </pre> | <pre> { "success": true, "message": "", "data": "" } </pre> |

19. 將影片從清單移除 (DELETE , URL: api/v1/playlist/{playlist_id}/video/{video_id})

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": "" } </pre> |

20.刪除播放清單 (DELETE , URL: api/v1/playlist/{playlist_id})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": "" } |

21. 搜尋授權期間內影集 (GET , URL: api/v1/program/?q={keywords}&page={page})

| Request | Response |
|--------------------------|--|
| Accept: application/json | Content-Type: application/json |
| | { "success": true, "message": "", "data": { "total_count": 11, "results": [{ "id": 1, "title": "Friends", "description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.", "authorized_start_datetime": "2019-09-02 11:16:35", "authorized_end_datetime": "2020-09-02 11:16:35", "updated_at": "2019-09-02 11:16:35", "episodes": [{ "video": { "id": 1, "title": "Faded", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "plays": 100, }, "episode": { "title": "劇場版 1/3", "order": 1 } },], }] } } |

| | |
|--|---|
| | <pre> "video": { "id": 2, "title": "Faded 2", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "plays": 100, }, "episode": { "title": "劇場版 2/3", "order": 2 } }, { "video": { "id": 3, "title": "Faded 3", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "plays": 100, }, "episode": { "title": "劇場版 3/3", "order": 3 } }] } } </pre> |
|--|---|

22.取得影集基本資訊 (GET , URL: api/v1/program/{program_id})

| Request | Response |
|--|--|
| Accept: application/json Content-Type: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": { "id": 1, "title": "Friends", "description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan." } } </pre> |

```

    "authorized_start_datetime": "2019-09-02
11:16:35",
    "authorized_end_datetime": "2020-09-02
11:16:35",
    "updated_at": "2019-09-02 11:16:35",
    "episodes": [
      {
        "video": {
          "id": 1,
          "title": "Faded",
          "description": "You were the shadow
to my light Did you feel us Another start You
fade away Afraid our aim is out of sight Wanna
see us Alive",
          "duration": 213,
          "created_at": "2019-09-02
11:16:35",
          "category": "娛樂",
          "plays": 100,
          "likes": 10,
          "liked": true
        },
        "episode": {
          "title": "劇場版 1/3",
          "order": 1
        }
      },
      {
        "video": {
          "id": 2,
          "title": "Faded 2",
          "description": "You were the shadow
to my light Did you feel us Another start You
fade away Afraid our aim is out of sight Wanna
see us Alive",
          "duration": 213,
          "created_at": "2019-09-02
11:16:35",
          "category": "娛樂",
          "plays": 100,
          "likes": 10,
          "liked": false
        },
        "episode": {
          "title": "劇場版 2/3",
          "order": 2
        }
      },
      {
        "video": {
          "id": 3,
          "title": "Faded 3",

```

| | |
|--|--|
| | <pre> "description": "You were the shadow to my light Did you feel us Another start You fade away Afraid our aim is out of sight Wanna see us Alive", "duration": 213, "created_at": "2019-09-02 11:16:35", "category": "娛樂", "plays": 100, "likes": 10, "liked": true }, "episode": { "title": "劇場版 3/3", "order": 3 } }] } } </pre> |
|--|--|

23.取得 banner 網址 (GET , URL: api/v1/index/banner)

| Request | Response |
|--|--|
| Accept: application/json Content-Type: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": "http://webXX.competitor.web.skill.tw/XX_Modul e_Y/banner/HAWhqT0kcpHWxT2I12Xj.jpg" } </pre> |

24.取得會員基本資訊 (GET , URL: api/v1/profile)

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json | Content-Type: application/json |
| | <pre> { "success": true, "message": "", "data": { "id": 1, </pre> |

| | |
|--|---|
| | <pre>"email": "root@localhost", "nickname": " sysop", "enabled": true, "verified": true, "user_type": "ADMIN", "created_at": "2019-09-02 11:16:35", "updated_at": "2019-09-02 11:16:35" } }</pre> |
|--|---|

25.取得會員列表 (GET , URL: api/v1/user)

| Request | Response |
|---|---|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json <pre>{ "success": true, "message": "", "data": [{ "id": 1, "email": "admin@localhost", "nickname": "admin", "verified": true, "user_type": "ADMIN", "created_at": "2019-09-02 11:16:35", "updated_at": "2019-09-02 11:16:35" }, { "id": 2, "email": "user1@localhost", "nickname": "user1", "verified": true, "user_type": "USER", "created_at": "2019-09-02 11:16:35", "updated_at": "2019-09-02 11:16:35" }, { "id": 3, "email": "user2@localhost", "nickname": "user2", "verified": true, "user_type": "USER", "created_at": "2019-09-02 11:16:35", "updated_at": "2019-09-02 11:16:35" }] }</pre> |

26.新增影集 (POST , URL: api/v1/program)

| Request | Response |
|---|--------------------------------|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |

| Content-Type: application/json | |
|---|--|
| <pre>{ "title": "Friends", "description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.", "authorized_start_datetime": "2019-09-02 11:16:35", "authorized_end_datetime": "2019-09-02 11:16:35" }</pre> | <pre>{ "success": true, "message": "", "data": 1 }</pre> |

27.修改影集內容 (PUT , URL: api/v1/program/{program_id})

| Request | Response |
|---|---|
| <pre>Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json</pre> | <pre>Content-Type: application/json</pre> |
| <pre>{ "title": "Friends", "description": "This hit sitcom follows the merry misadventures of six 20-something pals as they navigate the pitfalls of work, life and love in 1990s Manhattan.", "authorized_start_datetime": "2019-09-02 11:16:35", "authorized_end_datetime": "2019-09-02 11:16:35" }</pre> | <pre>{ "success": true, "message": "", "data": "" }</pre> |

28.將影片加入影集 (POST , URL: api/v1/program/{program_id}/video)

| Request | Response |
|--|---|
| <pre>Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 Content-Type: application/json</pre> | <pre>Content-Type: application/json</pre> |
| <pre>{ "video_id": 1 }</pre> | <pre>{ "success": true, "message": "", "data": "" }</pre> |

| | |
|--|---|
| | } |
|--|---|

29.將影片從影集移除 (DELETE , URL: api/v1/program/{program_id}/video/{video_id})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": "" } |

30.刪除影集 (DELETE , URL: api/v1/program/{program_id})

| Request | Response |
|---|--|
| Accept: application/json X-User-Token: d03bfc62c1d2f32052b8fb6c6d1357516a7ff7ec 6f6e96501eb7bde2073bf9d2 | Content-Type: application/json |
| | { "success": true, "message": "", "data": "" } |

C.6 – 選手注意事項

以下說明時用到 XX 代表選手個人的崗位編號，Y 代表模組編號

- 將完成的結果存在網站根目錄，用 XX_Module_Y 作為資料夾名稱
- 請確認已經將最新成果上傳至伺服器 XX_Module_Y 上，並運作正常
- 資料庫名稱為 cXX_module_y
- 請確認是否將首頁命名為適當的名稱，使得用瀏覽器開啟連結
http://cXX.web/XX_Module_Y/api/v1/ 可以連結到作答內容，以影片基本資訊的 API 為例，
當影片 ID 為 123456 時，網址必須為
[http://cXX.web/XX_Module_Y/api/v1/video/123456]
- 除了上傳影片的功能畫面之外，其餘必須使用 Server side render (SSR)，使用前端
framework 或 JavaScript 進行畫面的繪製不予計分。
- 若有使用 Framework 中的某些功能 (如 Job)，必須要執行某些指令時，請將要執行的指令寫
適合的說明放置於網站根目錄，說明文件為 README.txt

C.7 – 評分注意事項

以下說明時用到 XX 代表選手個人的崗位編號，Y 代表模組編號

- 請確認是否將首頁命名為適當的名稱，使得用瀏覽器開啟 api 功能，api 不可經過轉址，以影片基本資訊的 API 為例，當影片 ID 為 123456 時，網址必須為
[http://cXX.web/XX_Module_Y/api/v1/video/123456] 或是
[http://cXX.web/XX_Module_Y/public/api/v1/video/123456]

請勾選 V 您網站的首頁網址，以及 API 網址的開頭

[] - http://cXX.web/XX_Module_Y/api/v1/

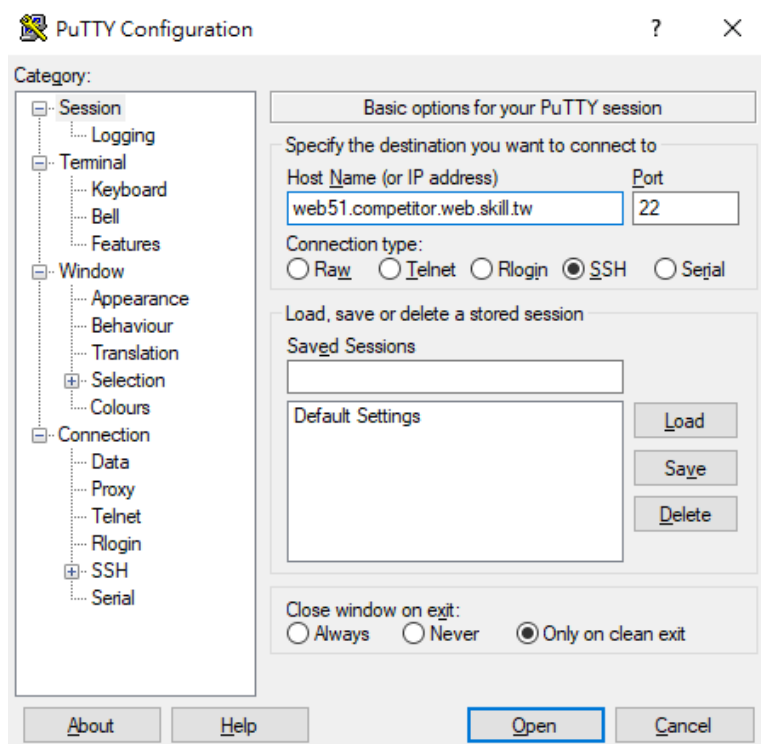
[] - http://cXX.web/XX_Module_Y/public/api/v1/

崗位編號: _____

簽名: _____

C.8 – 自動測試範例

1. 開啟 PuTTY 連線

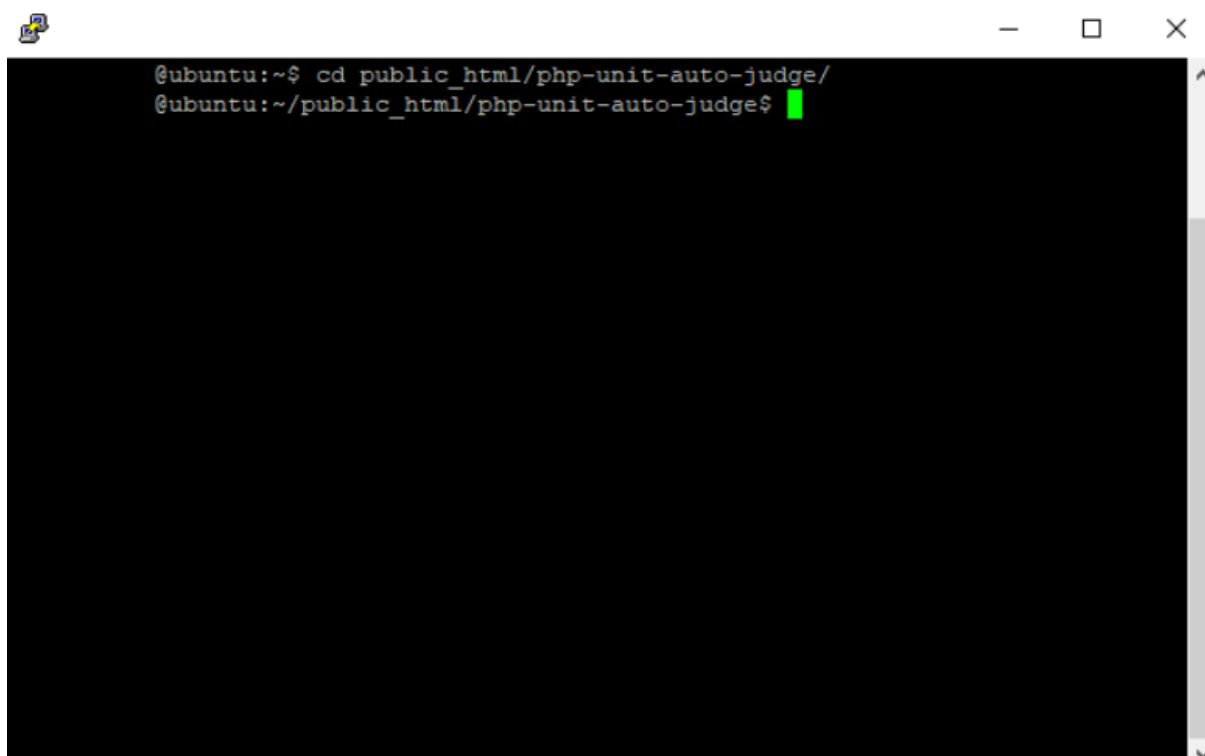


2. 登入使用者帳號及密碼



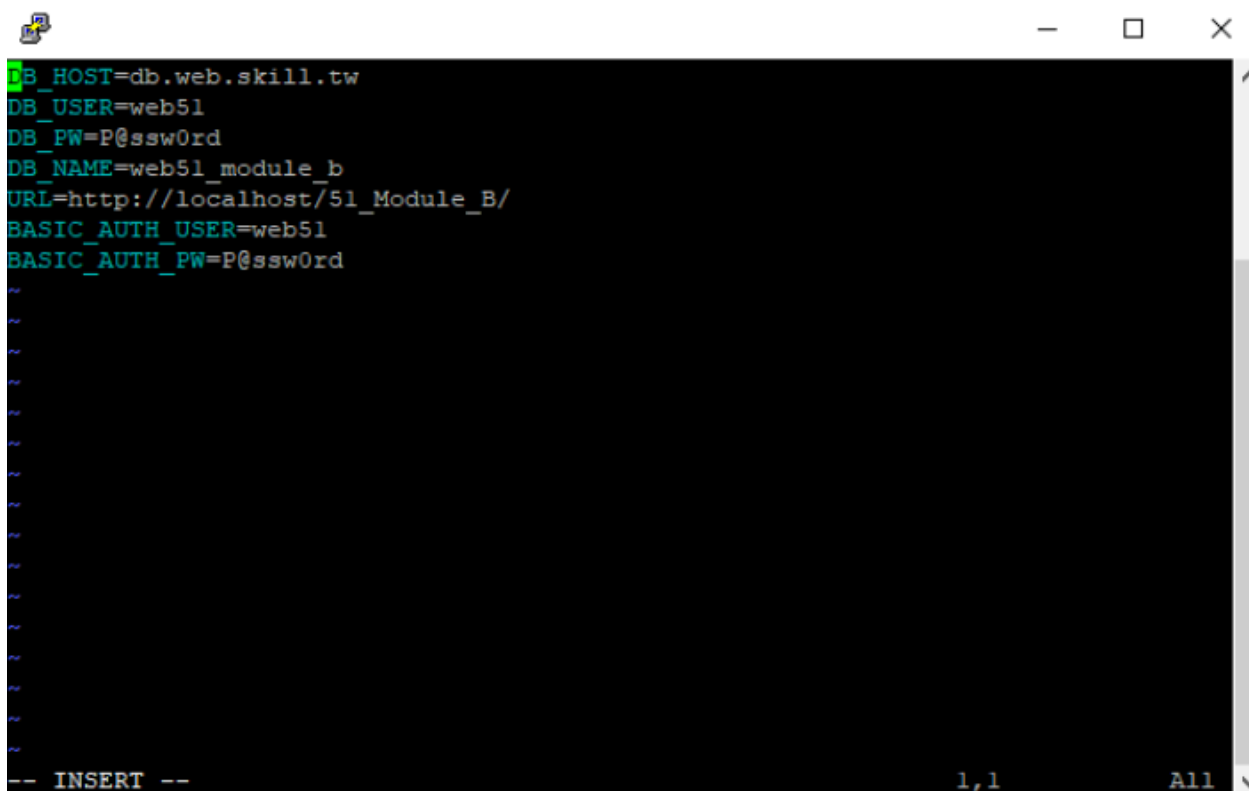
3. 進入自動測試系統資料夾

```
cd public_html/php-unit-auto-judge
```

A terminal window with a black background and white text. The prompt is @ubuntu:~\$. The first command is cd public_html/php-unit-auto-judge/. The second prompt is @ubuntu:~/public_html/php-unit-auto-judge\$ followed by a green cursor.

```
@ubuntu:~$ cd public_html/php-unit-auto-judge/  
@ubuntu:~/public_html/php-unit-auto-judge$
```

4. 設定 .env 參數

A terminal window with a black background and white text. It displays the contents of a .env file. The text is as follows:

```
B_HOST=db.web.skill.tw  
DB_USER=web51  
DB_PW=P@ssw0rd  
DB_NAME=web51_module_b  
URL=http://localhost/51_Module_B/  
BASIC_AUTH_USER=web51  
BASIC_AUTH_PW=P@ssw0rd
```

At the bottom of the window, there is a status bar with the text -- INSERT -- on the left, 1,1 in the middle, and All on the right.

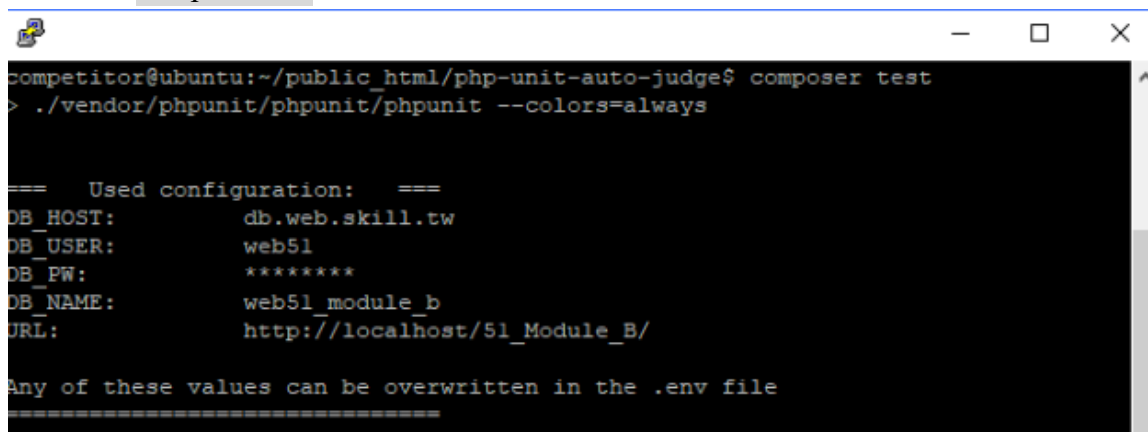
```
-- INSERT -- 1,1 All
```

其中

- `DB_USER`=資料庫使用者名稱
- `DB_PW`=資料庫密碼
- `DB_NAME`=資料庫名稱
- `URL`=要測試的檔案路徑
- `BASIC_AUTH_USER`=網站帳號
- `BASIC_AUTH_PW`=網站密碼

5. 跑測試 (在 Server 上執行)

- 方法一：`composer test`

A terminal window with a black background and white text. The prompt is 'competitor@ubuntu:~/public_html/php-unit-auto-judge\$'. The command 'composer test' has been executed, and the output shows the configuration used for the tests, including database host, user, password, name, and URL. The output is as follows:

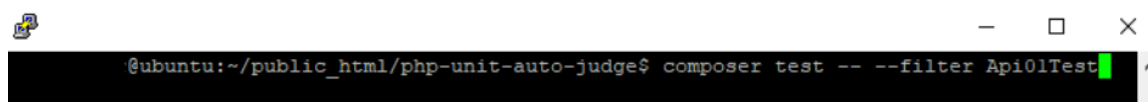
```
competitor@ubuntu:~/public_html/php-unit-auto-judge$ composer test
> ./vendor/phpunit/phpunit/phpunit --colors=always

=== Used configuration: ===
DB_HOST:      db.web.skill.tw
DB_USER:      web51
DB_PW:        *****
DB_NAME:      web51_module_b
URL:          http://localhost/51_Module_B/

Any of these values can be overwritten in the .env file
=====
```

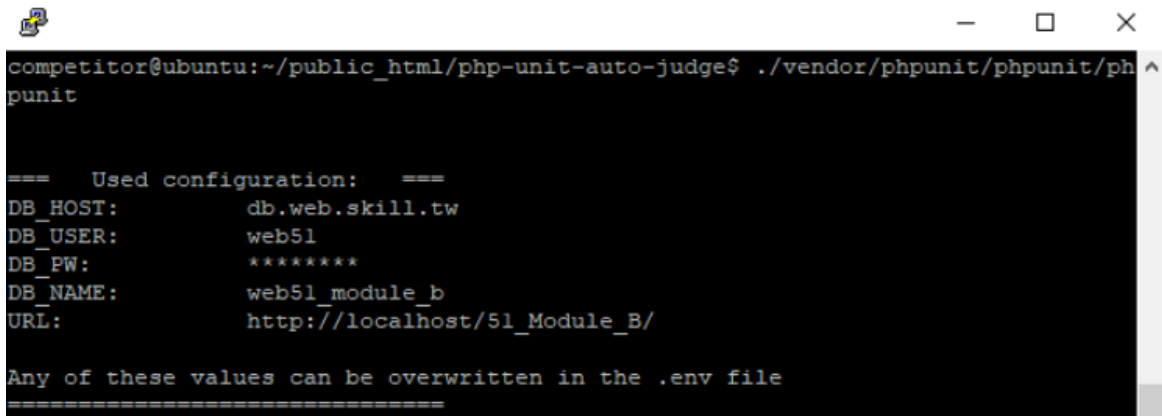
執行單一 API 測試 (以 API 01 使用者登入為例)

`composer test -- --filter Api01Test`

A terminal window with a black background and white text. The prompt is '@ubuntu:~/public_html/php-unit-auto-judge\$'. The command 'composer test -- --filter Api01Test' has been entered, and a green cursor is visible at the end of the line.

```
@ubuntu:~/public_html/php-unit-auto-judge$ composer test -- --filter Api01Test
```


- 方法二： `./vendor/phpunit/phpunit/phpunit`



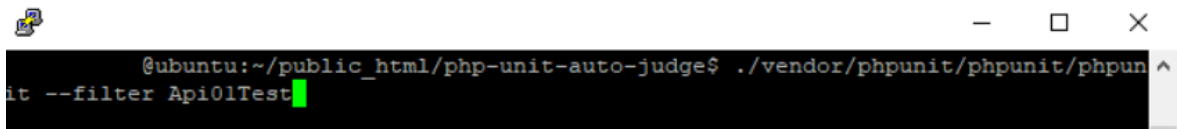
```
competitor@ubuntu:~/public_html/php-unit-auto-judge$ ./vendor/phpunit/phpunit/phpunit

=== Used configuration: ===
DB_HOST:      db.web.skill1.tw
DB_USER:      web51
DB_PW:        *****
DB_NAME:      web51_module_b
URL:          http://localhost/51_Module_B/

Any of these values can be overwritten in the .env file
=====
```

執行單一 API 測試 (以 API 01 使用者登入為例)

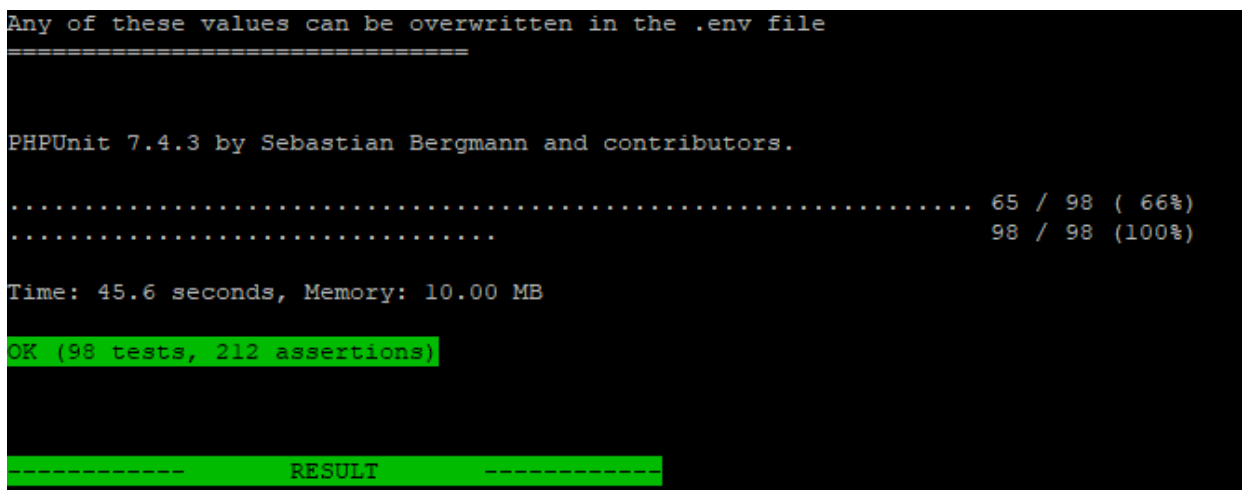
`./vendor/phpunit/phpunit/phpunit --filter Api01Test`



```
@ubuntu:~/public_html/php-unit-auto-judge$ ./vendor/phpunit/phpunit/phpunit --filter Api01Test
```

6. 查看測試結果

正確結果



```
Any of these values can be overwritten in the .env file
=====

PHPUnit 7.4.3 by Sebastian Bergmann and contributors.

..... 65 / 98 ( 66%)
..... 98 / 98 (100%)

Time: 45.6 seconds, Memory: 10.00 MB

OK (98 tests, 212 assertions)

----- RESULT -----
```

Summary 會有測試結果的詳細資訊

其中 AXX 的 XX 為 API 代碼，例如：A01 為 API 01 使用者登入

Summary:

```
A01: ok, full points
  testA01UserLoginSuccess: ok
  testA01UserLoginDisabled: ok
  testA01UserLoginInvalidEmail: ok
  testA01UserLoginInvalidPassword: ok
  testA01UserLoginInvalidRequest: ok
A02: ok, full points
  testA02Logout: ok
  testA02LogoutWithoutToken: ok
  testA02LogoutWithInvalidToken: ok
A03: ok, full points
  testA03ListPlaylist: ok
  testA03ListPlaylistWithoutToken: ok
  testA03ListPlaylistWithInvalidToken: ok
A04: ok, full points
  testA04CreatePlaylist: ok
  testA04CreatePlaylistDuplicated: ok
  testA04CreatePlaylistWithoutToken: ok
  testA04CreatePlaylistWithInvalidToken: ok
A05: ok, full points
  testA05PutVideoIntoPlaylist: ok
  testA05PutVideoIntoPlaylistVideoNotExists: ok
  testA05PutVideoIntoPlaylistVideoAlreadyInPlaylist: ok
  testA05PutVideoIntoPlaylistWithoutToken: ok
  testA05PutVideoIntoPlaylistWithInvalidToken: ok
A06: ok, full points
  testA06AdjustPlaylistOrder: ok
  testA06AdjustPlaylistOrderWrongVideosLength: ok
  testA06AdjustPlaylistOrderVideoNotExists: ok
  testA06AdjustPlaylistOrderVideoNotInPlaylist: ok
  testA06AdjustPlaylistOrderWithoutToken: ok
  testA06AdjustPlaylistOrderWithInvalidToken: ok
A07: ok, full points
  testA07GetPlayList: ok
  testA07GetPlayListNotFound: ok
  testA07GetPlaylistWithoutToken: ok
  testA07GetPlaylistWithInvalidToken: ok
A08: ok, full points
  testA08RemoveVideoFromPlaylist: ok
  testA08RemoveVideoFromPlaylistVideoNotFound: ok
  testA08RemoveVideoFromPlaylistVideoNotInPlaylist: ok
  testA08RemoveVideoFromPlaylistWithoutToken: ok
  testA08RemoveVideoFromPlaylistWithInvalidToken: ok
A09: ok, full points
```

錯誤結果

出現 **F** 的地方代表該測試錯誤

```

=====

PHPUnit 7.4.3 by Sebastian Bergmann and contributors.

.....F..... 65 / 98 ( 66%)
..... 98 / 98 (100%)

Time: 45.8 seconds, Memory: 10.00 MB

There was 1 failure:

1) WorldSkills\Tradel7\Tests\Feature\Api25Test::testA25GetUserProfile
Failed asserting that two arrays are equal.
--- Expected
+++ Actual
@@ @@
Array (
    'success' => true
    'message' => ''
-   'data' => Array (...)
+   'data' => ''
)

```

錯誤的內容會列出，`-` 代表缺少的資料，`+` 代表多餘的資料
Summary 會顯示測試錯誤的 API

```

A25: failed, 0 points
testA25GetUserProfile: failed
testA25GetUserProfileWithoutToken: ok
testA25GetUserProfileWithInvalidToken: ok

(scroll up to see the raw output of phpunit)

```