Joyn.de Test plan

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# Introduction

The Joyn.de (formerly 7TV Joint Venture GmbH) is a German joint venture of the media groups ProSiebenSat.1 Media and Discovery, which deals with streaming media products. Among other things, it operates the streaming platform Joyn, which has more than seven million users per month in January 2020, the pay-per-view service Maxdome Store and the sports streaming service Eurosport Player.

The streaming platform Joyn officially replaced its predecessor service 7TV on 18 June 2019, and the video-on-demand portal maxdome on 2 September 2020. In the 3rd/4th In the fourth quarter of 2020, the Eurosport Player and, later, the maxdome store were also integrated into Joyn.

Joyn offers a free service for smart TVs, mobile and PC devices. This is in German and includes the streaming of some series and films with advertising and live streaming from various TV channels.

The app with the largest free TV offering in Germany is launching today: With Joyn, viewers can now watch live streams of 55 channels for free and more conveniently than ever before on a single platform. All channels from ProSiebenSat.1, Discovery, Viacom, WELT, Sport1, channels of the public broadcasters ARD and ZDF plus other partners included. Joyn also offers a vast on-demand library of original series, shows, and exclusive previews for the best entertainment anytime, anywhere. In addition, more than 40 TV formats such as “Grey’s Anatomy” are already available on Joyn as previews. Of course, Joyn also has an attractive on-demand offering: For all viewers that have missed a TV show or want to watch it again, Joyn provides many shows in its media library for 30 days after broadcast. As the app launches, all content can be accessed without registration.

# Access

* <https://preprod.joyn.de/> **Password**: 7tv123joyn
* [Android app](https://www.apkmonk.com/app/de.prosiebensat1digital.seventv/)

# 

# 1. Test strategy

## 1.1 Scope of testing

### 1.1.1 Feature to be tested

| Module name | Description | |
| --- | --- | --- |
| Bookmarks & Bookmarks lane | **Where you can find this feature:** There is a bookmark icon on every detail page (series, movie, and compilation) and on all standard cards (desktop browsers). **What you should find there and test for:** If the user taps on the bookmark icon: - *Logged out user*: the login screen appears -> after login -> the bookmark icon is filled; - *Logged-in user*: the icon on the button is filled. As soon as at least 1 asset was bookmarked the bookmarks lane (header title "Merkliste") is displayed on home with the latest bookmarked asset in 1st position.  "Merkliste" also should be available in the User Account and in the header near the “Sport”. The bookmark lane can contain a maximum of 20 asset cards. After that an "Highlights auf Joyn" is displayed above the lane. If the user clicks on the link in header, a grid view is opened containing all bookmarked assets. If a user taps on a filled bookmark icon, the icon is unmarked and the asset card is removed from the bookmark lane. **HINT**: Bookmarks should also be shown when you log in with the same account on a different device/browser. | |
| Cards:  Channel Card | **Where you can find this feature:** Can be found in Search or in Channel lane on HOME (called Mediathek), on the TV Sender. **What you should find there and test for:** Channel cards show:   * the channel logo; * the vibrant color of the channel label (on Desktop shown on hover).   Clicking on a channel card opens a channel page, with the channel name as the headline. Channel cards are only available for channels with VOD ([Video on Demand](https://uk.wikipedia.org/wiki/%D0%92%D1%96%D0%B4%D0%B5%D0%BE_%D0%BD%D0%B0_%D0%B2%D0%B8%D0%BC%D0%BE%D0%B3%D1%83)) content - no empty grid views. | |
| Cards:  Feature Cards | **Where you can find this feature:**  Can be found on the HOME screen - currently named "Originals & Exclusives". **What you should find there and test for:** **Attention**: this lane might not be available to all users!  Details: This lane has featured content. Cards here contain:   * A nearly full-width image on mobile; * Art logo/headline; * Short description (on mobile); * For desktop on hover the genre, vibrant color, and short description appear; * [All] button; * Clicking on any asset card leads to the asset detail page. | |
| Cards:  Standard Cards | **Where you can find this feature:** Can be found in grid view, in lanes, on HOME, and in search.  **What you should find there and test for:** Standard cards:   * cover image; * brand logo in the top right; * an art logo /headline; * timing; * vibrant color on mobile, for desktop it appears on hover; * recommended age ([FSK](https://en.wikipedia.org/wiki/Freiwillige_Selbstkontrolle_der_Filmwirtschaft)); * for desktop, there is a hover effect that shows a short description (not on search overlay), an “Ansehen”, "Mehr Infos", and bookmark buttons; * clicking an asset card leads to a detailed page.   Series cards:   * all of the above for Standard Cards; * a number of available seasons; * genres.   Movie cards:   * all of the above for Standard Cards; * genre.   Compilation cards:   * all of the above for Standard Cards; * amount of videos.   Clicking on any standard card or the "Mehr Infos" button leads to the detail page. “Ansehen” button opens VOD player. | |
| Collection lane | **Where you can find this feature:**  Lane on start page e.g. ["Themen für dich"](https://i.imgur.com/P7qmCO8.png).  **What you should find there and test for:** Cards have the same width as a standard card but a smaller height, they contain:   * Picture; * Name; * Genre; * The gradient on the bottom; * Vibrant color (on hover for Desktop, always shown on mobile). | |
| Detail Page: Collection | **Where you can find this feature:**  Click on a card on the collection lane.  **What you should find there and test for:** The collection detail page contains:   * Headline; * Description; * Background image; * Content cards in grid view, or lane view; * Collection lane.   The hover effect on the cards has the same behavior as on standard lanes. Clicking on a card leads to the detail page of that asset. | |
| Detail Page: Compilation | **Where you can find this feature:**  [Mediathek lane](https://i.imgur.com/n3ALmu3.png) e.g.: Fail army, Ran, Welt.  **What you should find there and test for:** When clicking on a compilation card the compilation detail page opens. Elements:   * cover; * art logo; * “Highlights” tab (for some pages) with Feature cards; * “Alles von <compilationname> tab with Standard cards; * NO recommendations lane.   Details:   * the whole compilation can be bookmarked; * cards may contain progress bars (if watched before). | |
| Detail Page: Movie | **Where you can find this feature:** e.g. on the Mediathek channel "Netzkino"  **What you should find there and test for:** When clicking on a movie card the movie detail page opens. Elements:   * cover; * art logo; * info about duration; * channel logos; * play/resume (with progress bar) button labeled with "Jetzt ansehen" or "Jetzt weiterschauen" with progress; * bookmark button; * “Details” tab with:   + short description;   + genre;   + production;   + more metadata like FSK (on more overlay), channel logos; * “Ähnliche Videos” tab with recommendation lane.   Details:   * Clicking the play/resume button starts/resumes the asset in VOD player. | |
| Detail Page: Series | **Where you can find this feature:** On HOME or in search with results click on any series asset card.  **What you should find there and test for:** When clicking on an asset card the series detail page opens. Elements:   * cover; * art logo; * number of available seasons; * play/resume (with progress bar) button labeled with newest/latest watched episode; * bookmark button; * “Folgen” tab:   + season selector;   + episodes preview cards with a name, duration, FSK, and date. * "Clips" tab:   + episodes preview cards with a name, duration, FSK, and date. * "Details" tab:   + short description;   + genre;   + sender;   + production;   + copyrights. * “Ähnliche Videos” tab with recommendation lane.   Details:   * Cards may contain progress bars (if watched before). * Clicking the play/resume button starts/resumes episode labeled on the button. * If the content is also available with PLUS, an extra lane appears. (e.g. series "Check Check.") - clicking on an episode opens the upselling overlay. | |
| Hero Lane | **Where you can find this feature:** It can be found at the [very top](https://i.imgur.com/pl8GrbL.jpg) of HOME. **What you should find there and test for:** Shows one cover over the whole page width with a Play/Resume button, showing the newest/recently played season and episode on it. Click on the cover or “Mehr Infos” leads to the asset detail page. Click on the play/resume (“Ansehen” or “Aktuelle TV folge”) button immediately starts/resumes playback of the displayed episode. Click on the “Jetzt live” button opens Live TV. | |
| Live Lane | **Where you can find this feature:** It can be found at the [very top](https://i.imgur.com/pl8GrbL.jpg) of HOME. **What you should find there and test for:** Shows one cover over the whole page width with a Play/Resume button, showing the newest/recently played season and episode on it. Click on the cover or “Mehr Infos” leads to the asset detail page. Click on the play/resume (“Ansehen” or “Aktuelle TV folge”) button immediately starts/resumes playback of the displayed episode. Click on the “Jetzt live” button opens Live TV. | |
| Login -  Happy case | **Where you can find this feature:** Can be accessed via the bookmark button while logged out or the login link on the top right of the header.  **What you should find there and test for:** The login page is shown. URL starts with <https://interaction.7pass.de/>The login process contains two steps:  On the first step, you are on the page with only the *Email* field. Also, this page contains:   * Joyn logo; * **Willkommen bei Joyn** headline; * “Möchtest du dich registrieren oder einloggen? Gib einfach deine E-Mail-Adresse ein.” message; * email field with the placeholder: “E-mail-Adresse”; * “oder” line; * SSO logins for: Facebook, Google, Apple, Telegram, and Amazon.   Valid data:   * an email with "@" and "." and =< 6 chars; * password >= 6.   After the user enters a password, the message with info and the “Anmelden” button appears under the Email field.  If a non-existing email was entered, the invite message for registration should be sent to this email address. Also, the user should be redirected to the page with:   * Joyn logo; * **E-Mail für dich** headline; * “Wir haben eine E-Mail <useremail> geschickt. Klick einfach auf den Link in der Mail, dann kann's losgehen.” text; * Clickable “E-Mail-Adresse falsch?” string, which redirects to the previous email page.   The next page should contain:   * “Password” field with eye icon to show for 3 seconds entered a password; * clickable “Passwort vergessen?” forgot password string;   Click on the “Anmelden” should redirect users to the next page with “Du bist jetzt mit deiner E-Mail-Adresseriot@qa.teameingeloggt. Viel Spaß!” message and “Weiter” button.  Tapping in any textbox opens the keyboard on mobile. The focused textbox is marked with a white line. Tapping the "Noch kein Profil?..." string opens the registration page. After the login, the same page is shown as before. | |
| Playback: Autoplay (Next episode overlay) | **Where you can find this feature:** [Appears in VOD](https://i.imgur.com/gInCuHH.png) player 20s before the end of an episode where a follow-up episode is available.  **What you should find there and test for:** When playing back a VOD episode where the following episode is available, the revolver play appears in the 20s before the episode ends. It shows:   * title of series; * season/episode number and title of next episode (e.g. "S1 E2: episode title"); * a countdown; * "Jetzt abspielen" (DE) / "Play Next" (EN) button; * "Ausblenden" (DE) / "Hide" (EN) button.   The standard player UI is NOT displayed. Users can click on the "Ausblenden" ('Hide') button to dismiss the popup and watch credits. The next episode's playback starts after the current episode finishes. If there is no next episode, an overlay should not appear. There will be a recommendation shown after the video ended. | |
| Playback:  Live TV (UI) | **Where you can find this feature:** Can be found in the main navigation.  **What you should find there and test for:** The Live TV UI contains:   * Vibrant color gradient in the background. (should be the same as channel vibrant color); * Close icon; * Progress bar; * Remaining time of the current asset; * Fullscreen icon; * Sound volume icon; * "Programm" button = show EPG (electronic program guide). Note that there's no button for mobile in portrait mode, instead, the EPG is displayed below the video.   Important:   * If you are testing on a mobile, make sure to rotate the device, and tap on the full-screen button every now and then, to test the Live TV UI in all 4 modes (portrait with EGP below; portrait fullscreen [NOT FOR iOS!]; landscape; landscape fullscreen [NOT FOR iOS!]). * EPG and title on hover get updated as soon as a show ends. | |
| Playback: VOD | **Where you can find this feature:** VOD (Video On Demand) are all assets other than Live TV: Series, Movies, and Features.  **What you should find there and test for:** VOD Playback is essential for our users: being able to watch a series (using mobile data or WiFi) in good video and audio quality, with a good sync of audio & video (no lagging behind), acceptable loading/buffering times, and overall a great watching experience using the player controls (pause, 10 s forward/backward).  Please report any performance-related issues in this feature. Items watched should feature in the "Resume Lane" after having briefly watched the item (not including ads!! Please wait for the VOD content to start after the pre-roll Ads are finished). When going back to a Series Details Page where you have been watching an item (an episode) previously, the watch button should reflect the last watched episode and its progress on your device, displaying a preview progress bar. How to find VOD items? Use any of the lanes on the Home screen, except the Live TV lane. You can also use the search to find assets. Tip: searching for "." finds all entries, shown in alphabetical order. Note: if you are testing on a mobile device, keep changing rotation/orientation while testing! | |
| Playback:  VOD (UI) | **Where you can find this feature:** VOD (Video On Demand) are all assets other than Live TV: Series, Movies, and Features. **What you should find there and test for:** The normal VOD player UI contains (all in white): - close button; - progress bar (in vibrant color); - art logo / fallback text; - series number, episode number, series title; - (next episode button) - only for series; - skip forward/rewind buttons; - play/pause button; - remaining time; - volume button; - fullscreen button; - ad logo (for the not premium users). The progress bar can be scrubbed, the playback goes on from the position where the scrubber point was released. Clicking anywhere on the player makes UI fade in - fades out after 3s. Note: if you are testing on mobile devices, keep changing rotation/orientation while testing! Shortcuts for Desktop: Pause: Space Forward/rewind: Arrow side keys Loud: Arrow up/down Fullscreen: F or Enter Close fullscreen: F or ESC. | |
| Registration - Happy case | **Where you can find this feature:** There is a clickable register-for-free-string "Noch kein Profil? Hier kostenlos registrieren." On the Login overlay.  Also, users should be able to enter an email to the Email field on the Login page and click on the “Anmelden” button. After this, the invite message for registration should be sent to this email address.  **What you should find there and test for:**  The user should be redirected to the page with:   * Joyn logo; * **E-Mail für dich** headline; * “Wir haben eine E-Mail <useremail> geschickt. Klick einfach auf den Link in der Mail, dann kann's losgehen.” text; * Clickable “E-Mail-Adresse falsch?” string, which redirects to the previous email page.   From the link in the email, users should be redirected to the page with:   * Joyn logo; * **Schön, dass du da bist** headline; * “Du bist jetzt mit deiner E-Mail-Adresse <useremail> eingeloggt. Viel Spaß!” message; * “Weiter” button to proceed; * Clickable “Nicht du?” string, which redirects to the previous email page.   The next page is to create a Password:   * Joyn logo; * **Erstelle dein neues Passwort** headline; * “Damit dein Account geschützt ist, überleg dir ein möglichst sicheres Passwort.” message; * filled Email field; * “Passwort” field; * “Weiter” button (should be unclickable till the password filled).   Valid data = email with "@" and "." and =< 60 chars; password >= 6  After the click on the “Passwort” field, the requirements for the field should be shown. If requirements are met, they should be marked as done. Registration opens with the following parts: - Joyn logo - headline "Ein paar Fragen zu dir"; - textboxes for email; - 3 textbox for the birth date; - 3 radiobuttons for gender: "weiblich", "männlich", "divers"; - clickable text with terms of condition (AGB) and data security (Datenschutzbestimmungen) marked bold, will open in the new tab; - "Speichern" button (enabled as soon as all text boxes are filled with valid data).  For the regions outside the Germany, the page with message “Joyn ist im Ausland nicht oder nur begrenzt nutzbar.” also should be shown. Tapping in any textbox opens the keyboard on mobile. The focused textbox is marked with a white line. Tapping the terms of condition text opens legal pages, which will open in a new tab. Clicking the registration button gets you back to the home page. There is a colored circle around the account icon in the top right. | |
| Resume Behaviour | **Where you can find this feature:** Resume lane "Jetzt weiterschauen" is right below hero lane.  **What you should find there and test for:** The resume lane is called "Jetzt weiterschauen" and shows a maximum of 20 resume cards - there is NO "Alle >" link. The 1st resume card in the lane is the latest watched asset. SPECIAL CASE: Whenever finishing an episode where the next episode is available, the next episode will be displayed in the resume lane. Every resume cards shows:   * a cover image; * a progress bar at the bottom; * an art logo/title; * play icon and season + episode number (or for movies the remaining duration of the asset); * vibrant color on mobile, for desktop browser on hover.   Clicking a resume card resumes the playback from its current position. | |
| Search | **Where you can find this feature:** Magnifying glass button on the top right in the header.  **What you should find there and test for:** The search page opens as an overlay:   * Entering any invalid term -> a "Leider nichts gefunden." message is displayed beyond the search bar, and no assets are displayed. * Entering any valid term-> search results are displayed in a listview beyond the search bar. Channel cards are always displayed in first positions. Adding/Removing letters to the search triggers search results to update immediately. Search terms are stored when navigating to a detail page and then using the back button. | |
| Season & Episode lane (Detail page) | **Where you can find this feature:** Can be found at the bottom of every series detail page. **What you should find there and test for:** Beyond the play/resume button on series detail pages the season selector is displayed. - lists all available seasons in descending order. Clicking on any season number highlights it and displays all available episodes of this season in the episode selector below. The episode selector/lane shows all available episodes of the currently selected season. The episode cards show:   * cover; * episode title; * duration; * airdate; * availability flag (if available); * the progress bar on the covers.   Clicking on any episode starts its playback. The play/resume button also adapts its labeling to the latest watched episode. | |

### 

| Feature to be tested in the Web version | Feature to be tested in the Mobile version |
| --- | --- |
| * Bookmarks & Bookmarks lane * Cards: Channel Card * Cards: Feature Cards * Cards: Standard Cards * Collection lane * Detail Page: Collection * Detail Page: Compilation * Detail Page: Movie * Detail Page: Series * Hero Lane * Live Lane * Login - Happy case * Playback: Autoplay (Next episode overlay) * Playback: Live TV (UI) * Playback: VOD | * Live Lane * Login - Happy case * Playback: Autoplay (Next episode overlay) * Playback: Live TV (UI) * Playback: VOD * Playback: VOD (UI) * Registration - Happy case * Resume Behaviour * Search * Season & Episode lane (Detail page) |

### 1.1.2 Feature not to be tested

* Ad Blocker
* Ads
* Sport: Match asset
* Sport: Sub home
* Sports: Competition Page
* Sports: PLUS channels in FREE user Live lane and EPG
* Sports: Pop-up Channels
* All features on iOS app
* Premium condition

## 1.2 Test type

* Munual testing
* Grey box testing
* Sanity testing
* Smoke testing
* Exploratory testing

## 1.3 Risk and issues

| Risk | Mitigation |
| --- | --- |
| Lack of electricity | Organize two alternative workplaces. |
| Lack of internet connection | Organize two alternative workplaces. Ensure mobile internet connection and home internet |

## 1.4 Test logistics

### 1.4.1 Who will test?

The project should use:

* Nikita Minchenko (Junior QA Engineer, Scram Master)
* Yurii Levchenko (Junior QA Engineer)
* Denys Bielov (Junior QA Engineer)
* Yevhenii Massalov (Junior QA Engineer)
* Dmytro Vasyliuk (Junior QA Engineer)

With the help:

* Serhii Dziuba (Middle QA Engineer)
* Yevhen Stepanenko (Senior QA Engineer)

### 1.4.2 When will the test occur?

The tester will start the test execution when all the following inputs are ready:

* Test plan approved
* Requirements approved
* Test Cases are created
* Test Environment is built

# 2. Test objective

The test objectives are to verify the functionality of the Joyn.de app (web and android mobile vesion). The testing should be focused on the flow of access to the video materials and playing videos. The main feature is streaming.

# 3. Test criteria

### 3.1 Suspension criteria

If the team report that there are 30% of test cases failed, suspend testing until the development team fixes all the failed cases.

### 3. 2 Exit criteria

Specify the criteria that denote successful completion of a test phase:

* Run rate is mandatory to be 100% unless a clear reason is given.
* Pass rate is 90%, achieving the pass rate is mandatory.

# 4. Resource planning

## 4.1 System resource

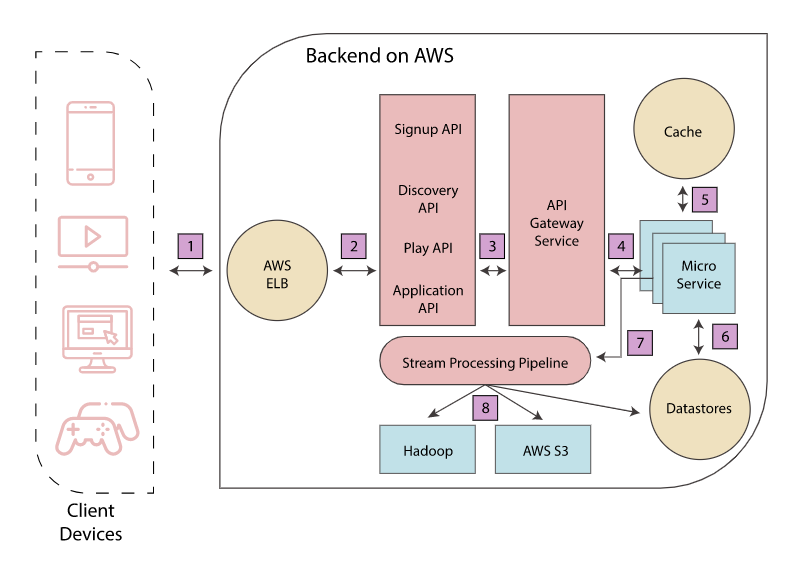
| Resources | Description |
| --- | --- |
| Network | LAN Gigabit internet line  LTE Mobail internet connection |
| Computer | Windows/macOS/Linux (last version), Ram 8GB, CPU 3.4GHZ |
| Smartphone | Android(last version), Ram 4GB, CPU 1.8GHZ |
| Emulator | Android Studio (last version) |
| Browsers | Google Chrome (last version) |
| VPN | VeePN (last version) - Chrome Extensions  Free VPN (last version) - Mobile version |

## 4.2 Human resource

| Team members | Position | Tasks |
| --- | --- | --- |
| Nikita Minchenko | Junior QA Engineer,  SM | * Manage Scrum process * Make web decomposition * Test ‘Detail Page: Collection’ web feature * Test ‘Detail Page: Compilation’ web feature * Test ‘Detail Page: Movie’ web feature * Test ‘Detail Page: Series’ web feature * Test ‘Hero Lane’ web feature * Test ‘Live Lane’ web feature * Test ‘Playback: Autoplay (Next episode overlay)’ web feature * Make Test report |
| Yurii Levcenko | Junior QA Engineer | * Make Test Plan * Make web decomposition * Test ‘Bookmarks & Bookmarks lane’ web feature * Test ‘Cards: Channel Card’ web feature * Test ‘Cards: Feature Cards’ web feature * Test ‘Cards: Standard Cards’ web feature * Test ‘Collection lane’ web feature * Test ‘Playback: Live TV (UI)’ web feature * Test ‘Playback: VOD’ web feature |
| Denys Bielov | Junior QA Engineer | * Make permission testing table * Make mobile decomposition * Test ‘Live Lane’ mobile feature * Test ‘Login - Happy case’ mobile feature * Test ‘Playback: Autoplay (Next episode overlay)’ mobile * Test ‘Playback: Live TV (UI)‘ mobile feature * Test ‘Playback: VOD’ mobile feature |
| Yevhenii Massalov | Junior QA Engineer | * Make RTM * Make mobile decomposition * Test ‘Playback: VOD (UI)’ mobile feature * Test ‘Registration - Happy case’ mobile feature * Test ‘Resume Behaviour’ mobile feature * Test ‘Search mobile’ feature * Test ‘Season & Episode lane (Detail page)’ mobile feature * Test ‘Login - Happy case’ web feature |

# 5. Test environment

Testing should be conducted in the preproduction environment. The architecture of the platform is below:

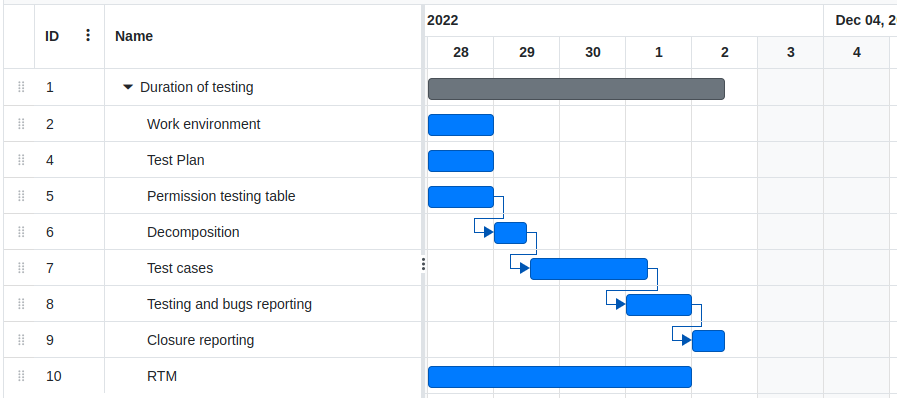


# 6. Schedule & estimation

## 6.1 All project tasks and estimation

| Task | Team Members | Effort |
| --- | --- | --- |
| Work environment | Nikita Minchenko | 8 human-hours |
| Test Plan | Yurii Levchenko | 8 human-hours |
| Permission testing table | Denys Bielov | 8 human-hours |
| Decomposition | Nikita Minchenko  Yurii Levchenko  Denys Bielov  Yevhenii Massalov | 16 human-hours |
| Test cases | Nikita Minchenko  Yurii Levchenko  Denys Bielov  Yevhenii Massalov | 48 human-hours |
| RTM | Yevhenii Massalov | 8 human-hours |
| Testing and bugs reporting | Nikita Minchenko  Yurii Levchenko  Denys Bielov  Yevhenii Massalov | 32 human-hours |
| Closure reporting | Nikita Minchenko  Yurii Levchenko  Denys Bielov  Yevhenii Massalov | 4 human-hours |

## 6.2 Schedule to complete these tasks



# 7. Test deliverables

## 7.1 Before testing phase

* Test cases
* Decomposition
* Permission testing table

## 7.2 During the testing

* Test data
* RTM

## 7.3 After the testing cycle is over

* Bug reports
* Test report