Appendix B

User manual

B.1 Introduction

B.1.1 Stakeholders

This appendix provides a user manual for others to use our applet. As the stakeholders are different, the interface of the applet after entering is also different. Therefore, the user manual will introduce the applet and explain the use of the relevant pages according to different stakeholder perspectives.

In this applet, we provide **3** sakeholders which are:

- **Project manager**: be able to view all the projects he owns, monitor and manipulate project progress and related information in real time. Also he can get feedback on tasks from workers and house owners.
- **House owner**: be able to view his project, monitor progress and send feedback to project manager.
- **Worker**: be able to view all tasks he is responsible for, modify the task status according to the actual work status and send feedback to project manager.

B.2 General operation

B.2.1 Registration and log in

Only registered users can access the applet. To use it, first register an user account by obtaining authorization.

(i) Click ***Confirm*** button → Allow users to authorise the applet.

(ii) click ***Allow*** button → After obtaining authorization, users will navigate to their home pages according to their identity. The default identity for new users is ***House owner***.

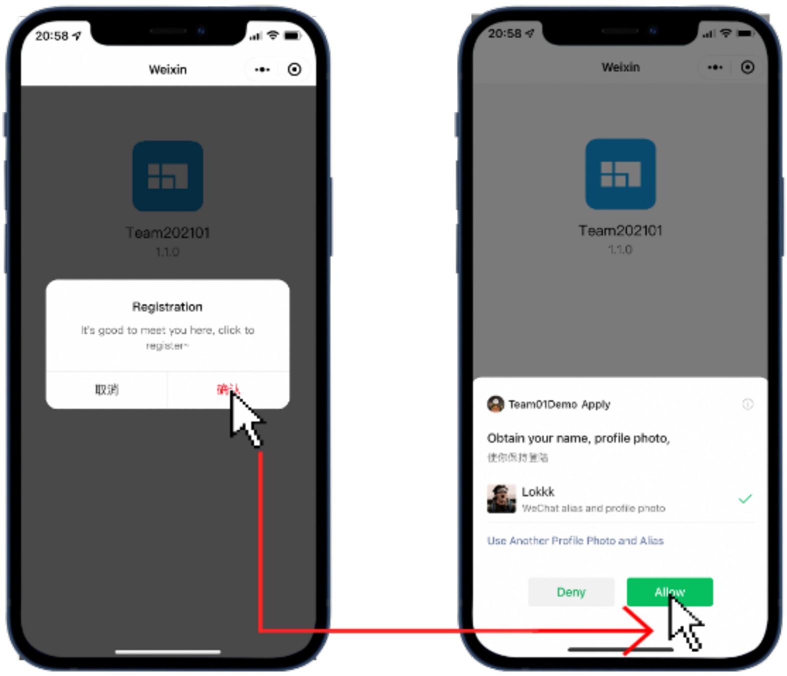

Figure.1 Registration and log in

B.3 Project manager interface

B.3.1 Home page

- Click the ***Projects*** tab-bar (default view) → Check the list of projects that the project manager is responsible for.
  - Click ***Statistics Report*** → Swipe to view all projects and tasks progress through statistics.

    The ***top ring progress bar*** represents the overall progress of all responsible projects, calculated as the ratio of the sum of all unfinished tasks to the sum of the total tasks. Each project also has own statistics at the bottom.

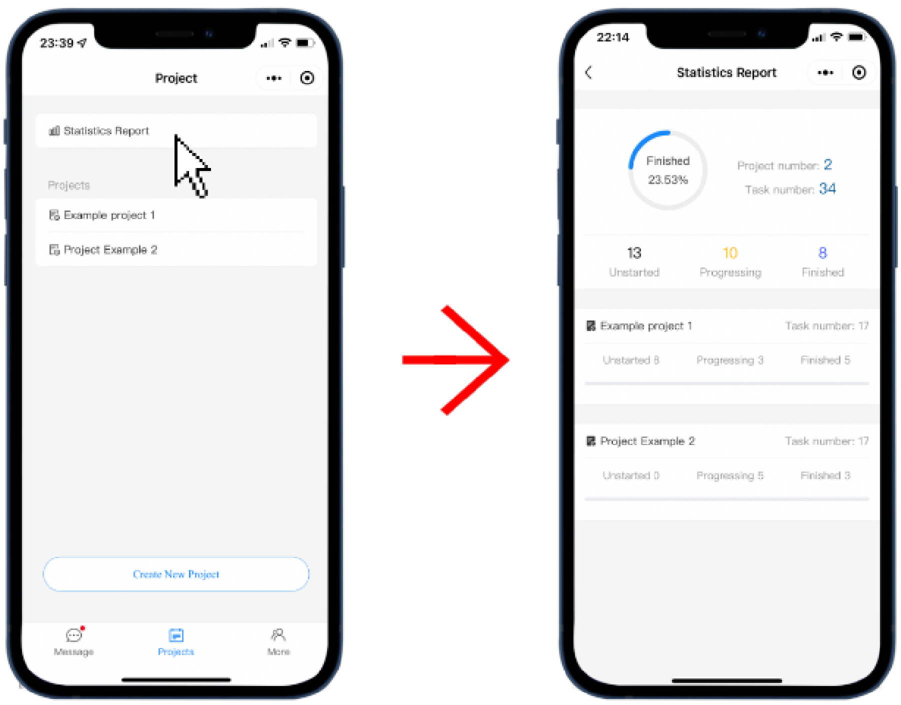

Figure.2 Home page and statistics report page

- Click any single project in report → Skip to individual ***project's information page***. (For more details, please check *B.3.2*)
- Click the ***Create New Project*** button → Navigate to create new project page. (For more details, please check *B.3.3*)

- Click the ***Message*** tab-bar → Checking feedback send from house owners and workers to keep track of project progress.
  - Messages marked in ***yellow*** are unread messages. The top row of the list displays the newest feedback that stakeholders sent.
  - Click any message in list → Navigate to ***individual feedback page***. The detailed page introduces feedback type, feedback description, belonged task and project, creator, create-time, and related photos. The project manager has only the right to read, not the right to modify the feedback.

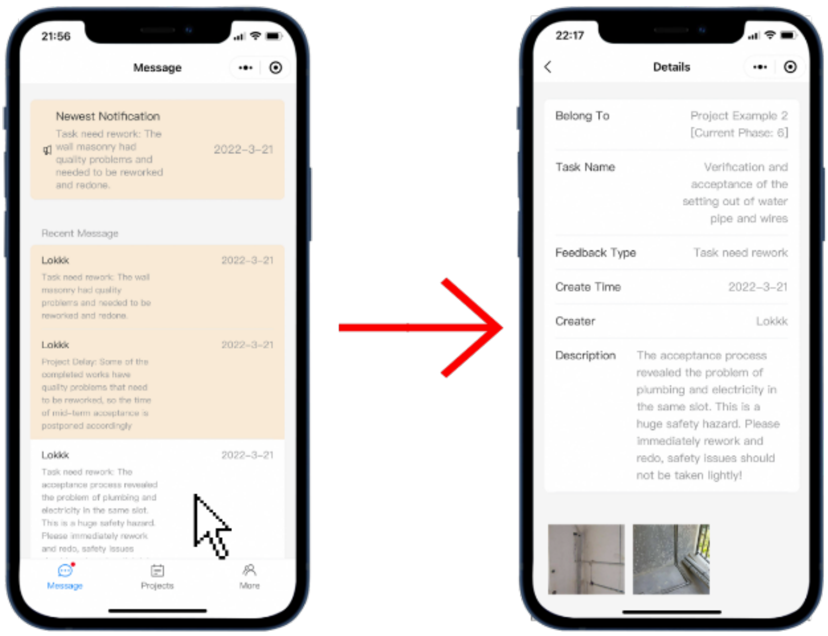

Figure.3 Message page and detailed feedback

- Click the ***More*** tab-bar → View applet and personal information.
  - Click ***User name*** → Edit the user name.
  - Click ***language*** → Choose the preferred applet language.
  - Click ***Invite member*** (Only for ***project manager***) → Invite new users to sign up for the applet with a specific identity.
    - Select the identity of the invitee → The system will generate a sharing link, which users can share directly to their friends in WeChat.

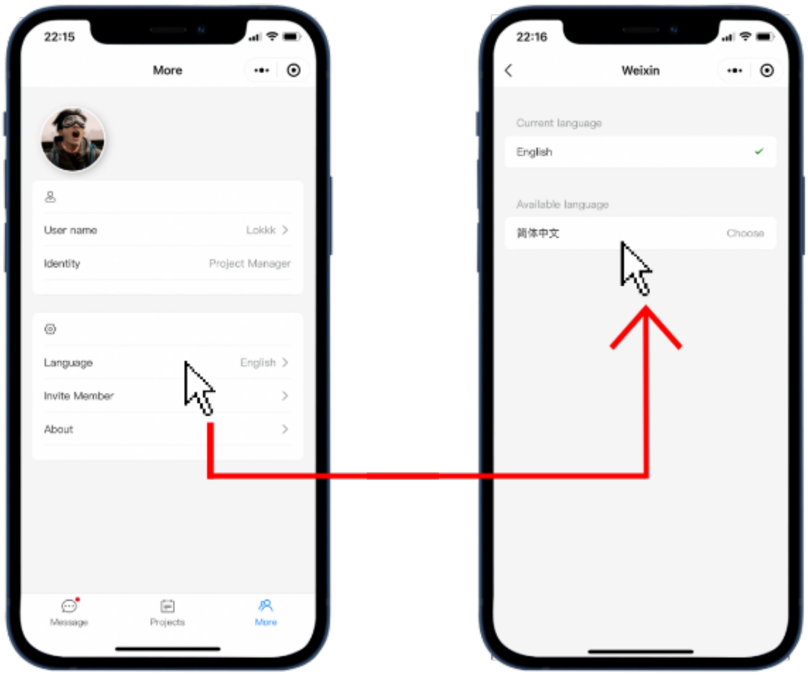

Figure.4 More page and language setting

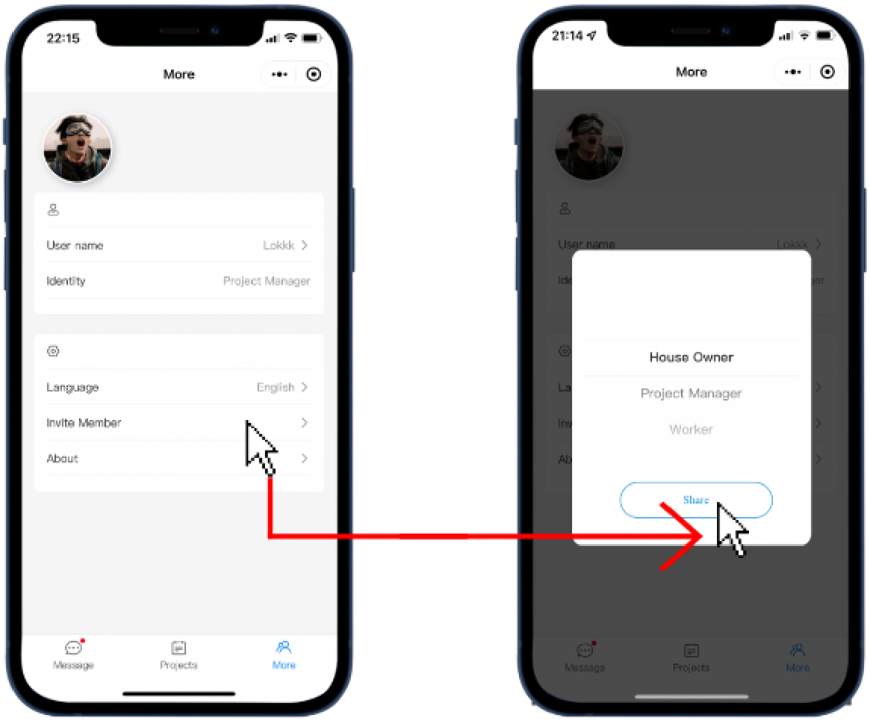

Figure.5 Invite members

B.3.2 View single project's information

- From the home page, click any project and the applet will navigate to this information page.
- Click the ***Project Information*** tab-bar (default view) → View the basic information of single project.
  - The information page includes 3 aspects: The basic information, the statistics report, and the feedback list for the project.
  - Project manager can ***edit*** the related photos for the project.

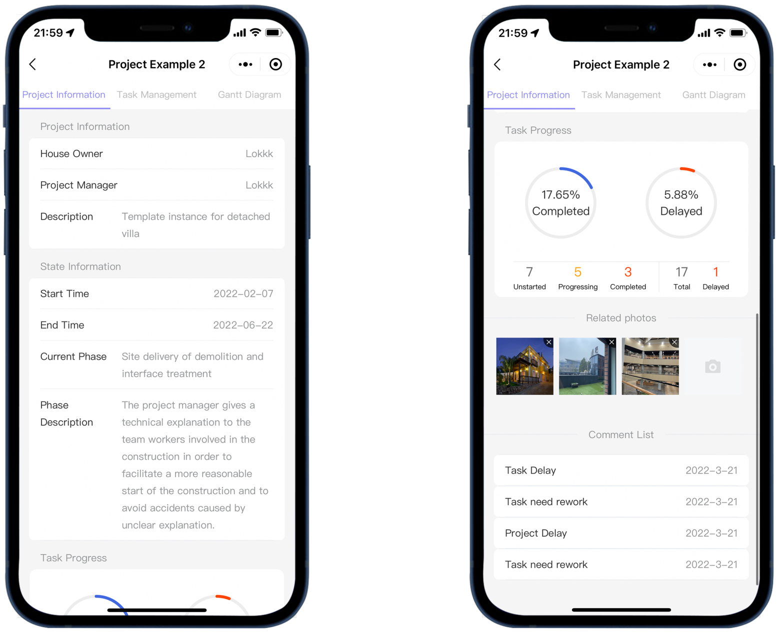

Figure.6 Project information page

- Click the ***Task Management*** tab-bar → View all tasks under this project, categorized by project status.
  - Click different tags → View tasks in different state.
  - Click any task → Navigate to ***individual task information page***. (For more details, please check *B.3.4*)
  - Click the ***Create New Task*** button to create new tasks for the project.

(For more details, please check *B.3.5*)

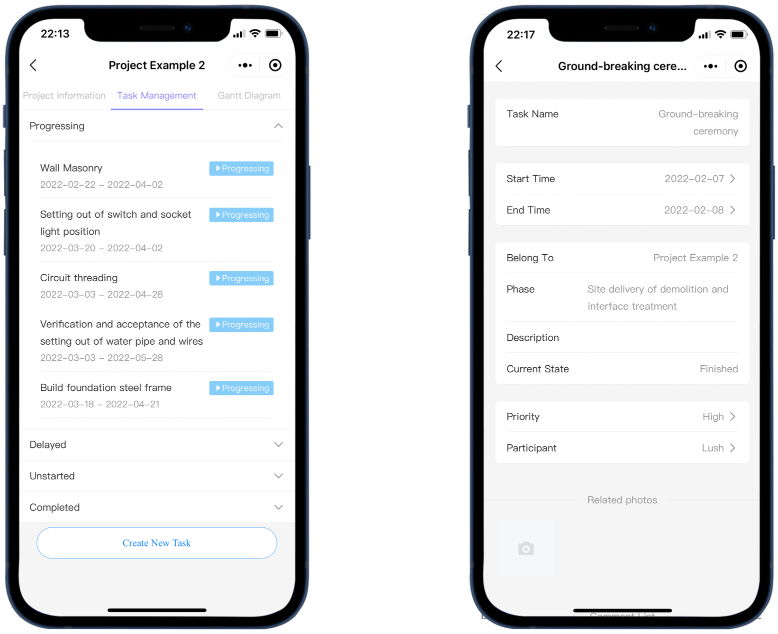

Figure.7 Task management page and detailed task information

- Click the ***Gantt Diagram*** tab-bar → View the Gantt diagram of the whole project progress. The ***arrows*** on the chart connect the previous and subsequent processes of each task.

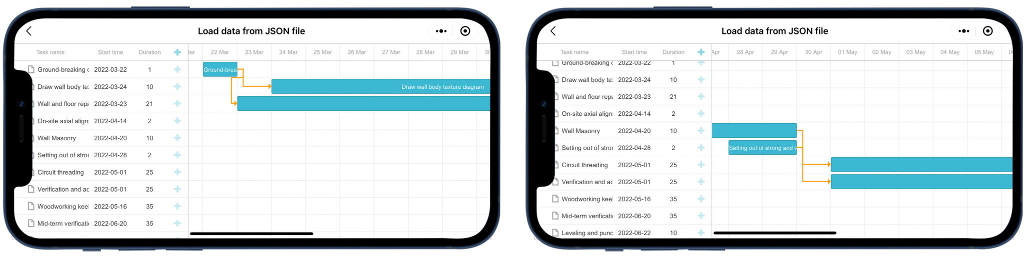

Figure.8 Gantt diagram (Can preview in both vertical and horizontal screens)

B.3.3 Create new project

- Click ***Create new project*** button in home page can navigate to this page.
- Fill in the basic information of the project.

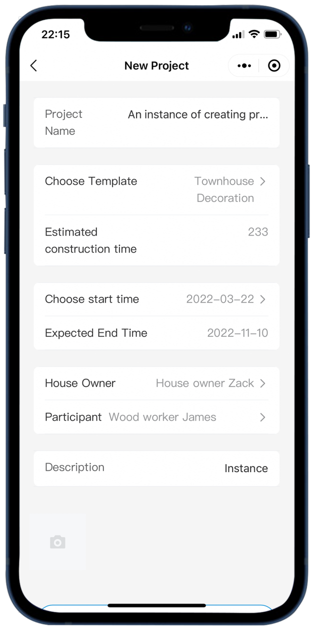

Figure.9 Create new project

(i) Click ***Project Name*** → Input new project name.

(ii) Click ***Choose Template*** → Choose one template in list to create template tasks for the project automatically. The tasks in the template have been set up with the tasks in the pre-sequence and post-sequence, as well as the duration and priority.

(iii) Click ***Choose start time*** → Select the start date for project. Also, the end time of the project will be set automatically by the template settings.

(iv) Click ***House Owner*** → Select **one** House owner in list.

(v) Click ***Participant*** → Select workers responsible for the project.

(vi) Click ***camera icon*** → Upload related photos.

(vii) After fill completely, click ***Submit*** button → Finished creation of project. Then the system will automatically navigate to the home page, while tasks in template will be either created.

B.3.4 View single task's information

- From the individual project information page, click ***Task Management*** tab-bar and click any task and the applet will navigate to this information page.
- The task information page includes the basic information and the feedback list.

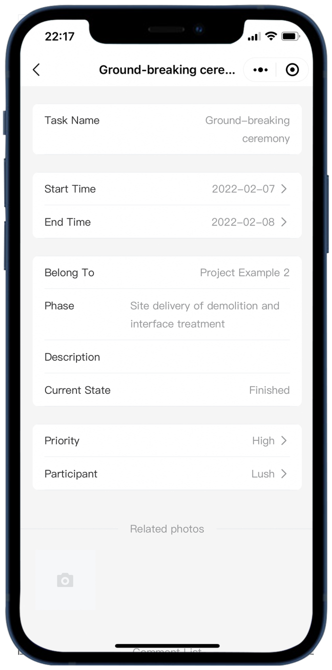

Figure.10 Project information page

- Project manager can edit the task information which includes changing ***Priority, Start Time and related photos***.

B.3.5 Create new task

- In single project information page, click ***Create new task*** button in ***Task Management*** tab-bar page can navigate to this page.
- Fill in the basic information of the task.

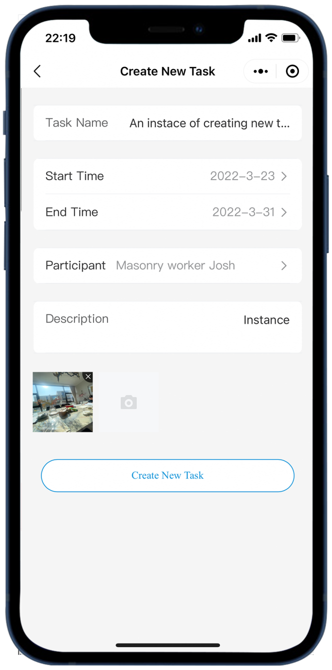

Figure.11 Create new task

(i) Click ***Task Name*** → Input new task name.

(ii) Click ***Choose start time*** / ***Choose end time*** → Select the start or end date for task.

(iii) Click ***Participant*** → Select workers responsible for the task.

(iv) Click ***camera icon*** → Upload related photos.

(v) After fill completely, click ***Submit*** button → Finished creation of project. Then the system will automatically navigate back to the project information page,while the task will be added to the task list.

B.4 House owner interface

B.4.1 Home page

- Click the ***Projects*** tab-bar (default view) → Check the list of projects that the project manager is responsible for. Each task in the ***Task List*** displays the task name, status, priority and time.

  – Click ***My project*** → Swipe to view all projects and tasks progress through statistics. This page is similar to the project manager's individual project information page (***B.3.2***).

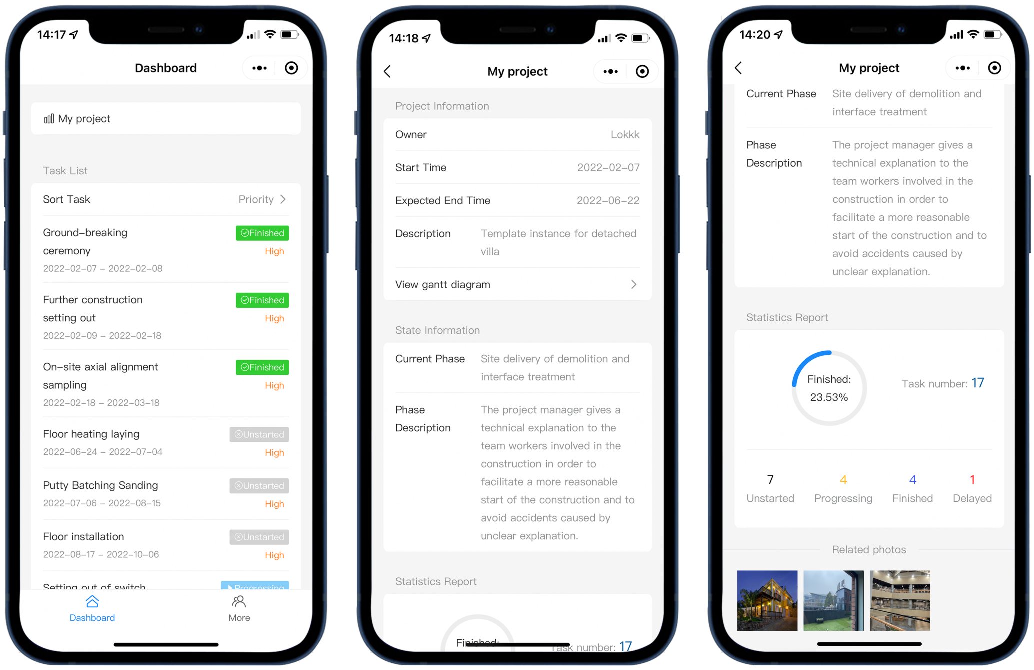

Figure.12 Home page and house owner's project information page

  – Click the ***Sort Task*** button → can list all the tasks in either ***Priority*** order or ***Time*** order.

  – Click any task → skip to its ***detailed information page***. (For more details, please check *B.4.2*)

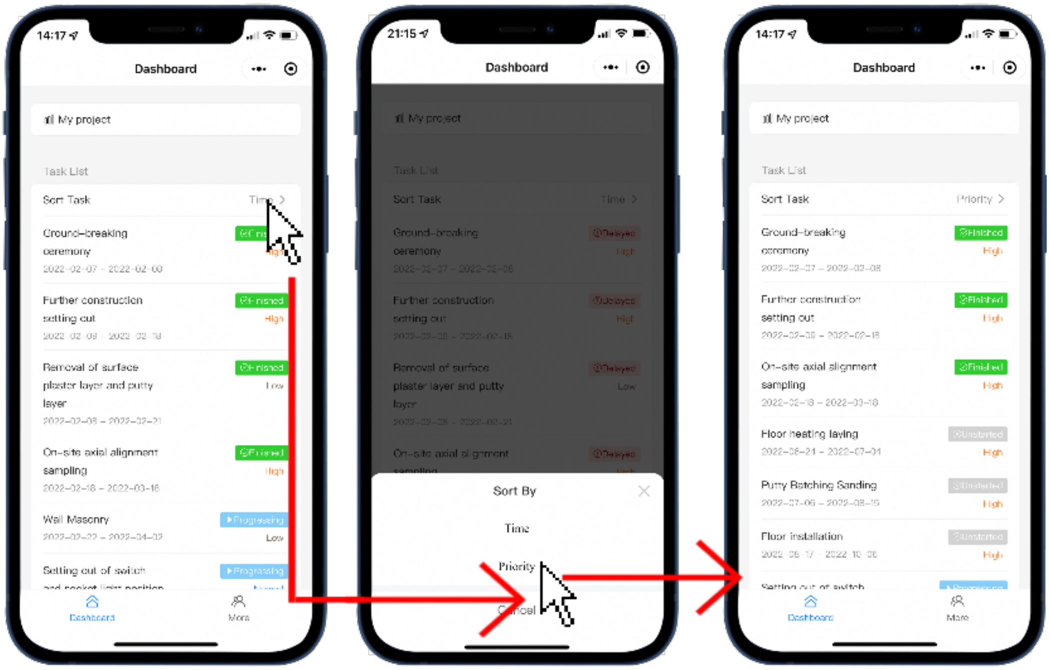

Figure.13 Choose the sort order of the tasks

- Click the ***More*** tab-bar → View applet and personal information. This is same to the part in ***B.3.1 home page***.

B.4.2 View single task's information

- From the home page, click any task in list will navigate to this individual information page.
- The task information page includes the owner names, task description, work duration, task state, related photos. At the bottom, there is a feedback list that contains all feedback belonged to this project.

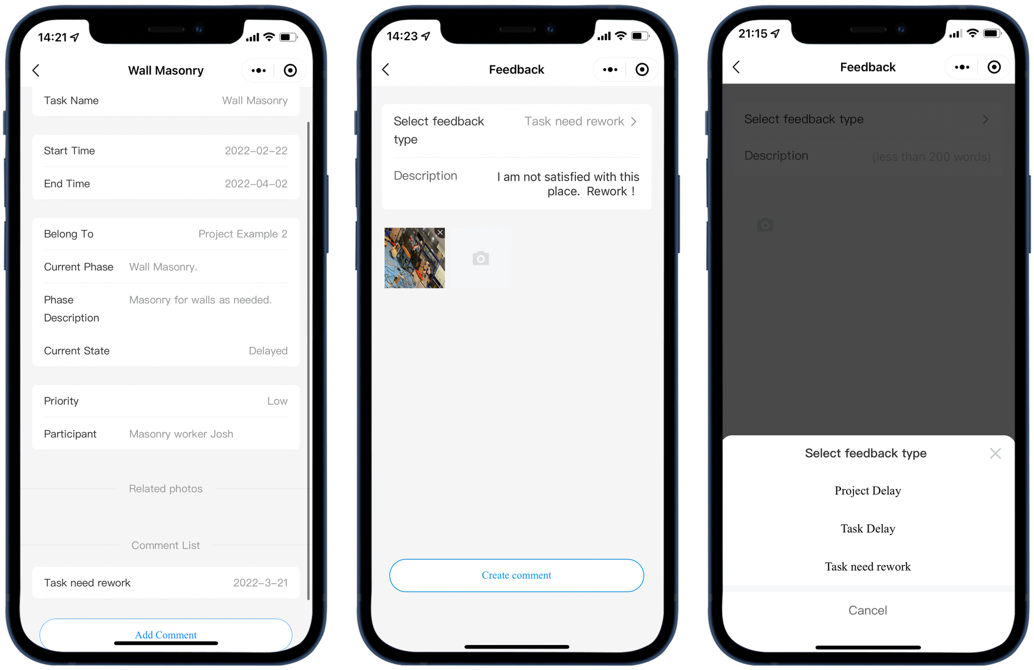

Figure.14 Task information page and create new feedback

- Click ***Add comment*** button → House owner can create new feedback about the task efficiency to the project manager who is responsible for this project.
  - There are 3 feedback types for house owners to choose: **Project delay**, **Task delay** and **Task need rework**.
  - After fill completely, click ***Submit*** button → Finished creation of comment (feedback). Then the system will automatically navigate back to the task information page,while the feedback will be added to the task list.

B.5 Worker interface

B.5.1 Home page

- Click the ***Dashbooard*** tab-bar (default view) → Check the list of tasks that the worker is responsible for. These tasks are grouped according to the project they belong to.
  - Click ***Project names*** → Swipe to view project information. This page is similar to the house owner's individual project information page (***B.3.2***).

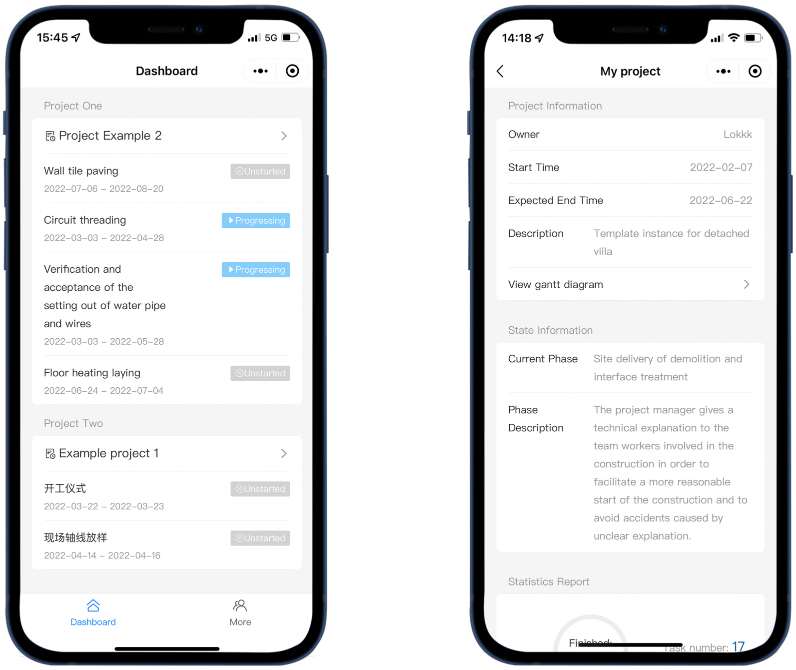

Figure.15 Home page for worker and project information

  - Click any task → Skip to its ***detailed information page***, which is similar to the house owner's task page. There is an addition function for worker to ***update the task status***:
    (i) Click ***Upload image update task state*** button.
    (ii) Click ***camera icon*** → Upload photos to prove that the current task

has been completed.

(iii) Click ***Confirm*** → Confirm the upload and the task status will then be automatically updated to the next status. At the same time the project manager will receive feedback on the upload details.

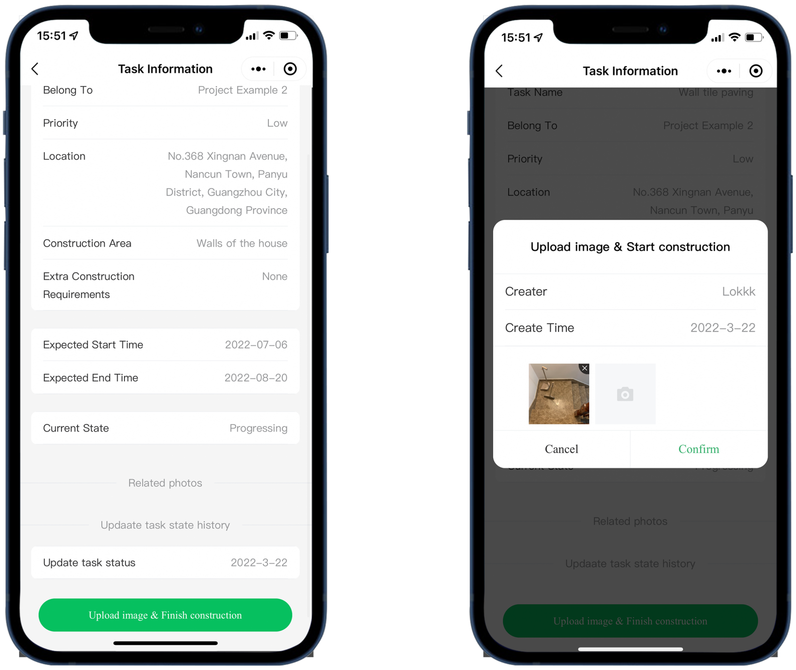

Figure.16 Task page for worker and update status action

- Click the ***More*** tab-bar → View applet and personal information. This is same to the part in ***B.3.1 home page***.