Test Project

Mobile Applications Development

Module C Implement

Day 3 P.M.

Submitted by:
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Contents

Introduction

WorldSkills is holding the global WorldSkills Competition all over the world in October 2022. As the organizer of this competition, WorldSkills hopes to develop relevant apps to serve the audience who pay attention to this competition.The audience can sit at home, learn about WorldSkills, feel the atmosphere of the competition , and follow the dynamics of the competition through pictures and videos from the app.
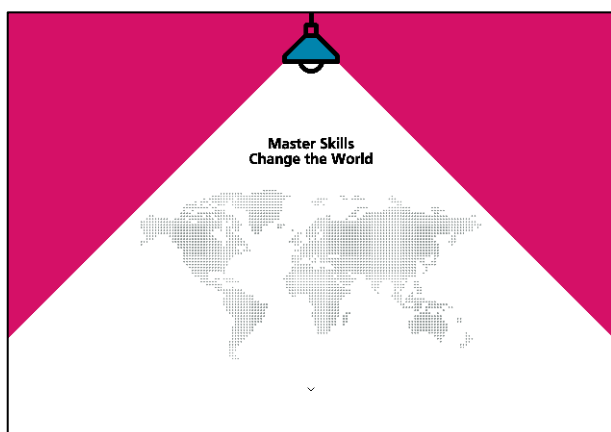
The designer has provided you with two versions of product prototypes-- phone and tablet. As a developer of mobile applications, your task is to develop the corresponding app in strict accordance with the requirements of the prototype and the videos.
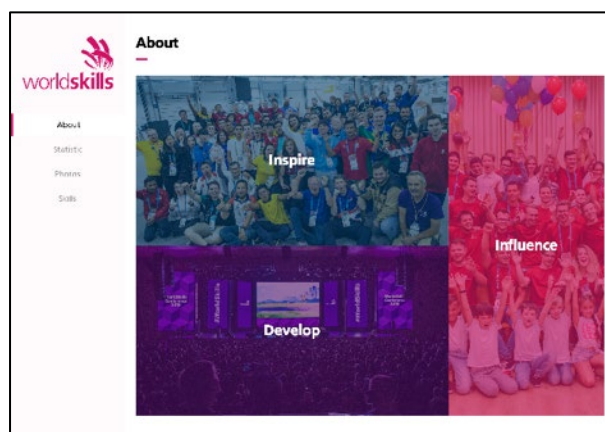
Description of project and tasks

This development needs to be carried out in strict accordance with the style of the prototype and the requirements. The task is divided into two parts according to different equipment types:

	Part	Name	Competition time	Marking devices
	A.M.	Implement(phone)	2.5	Emulator: Pixel 2 or iPhone 8 Plus
✓	P.M.	Implement(tablet)	2.5	Emulator: Pixel C or iPad pro (9.7-inch)

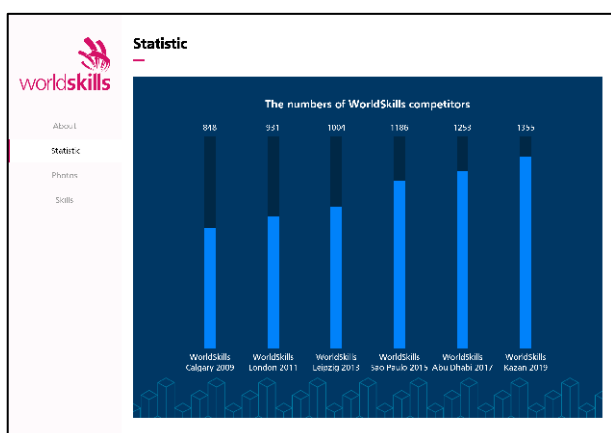The following is an overview of some prototyps, please check the **media-files** for details.

Welcome

About

Statistic   Photos
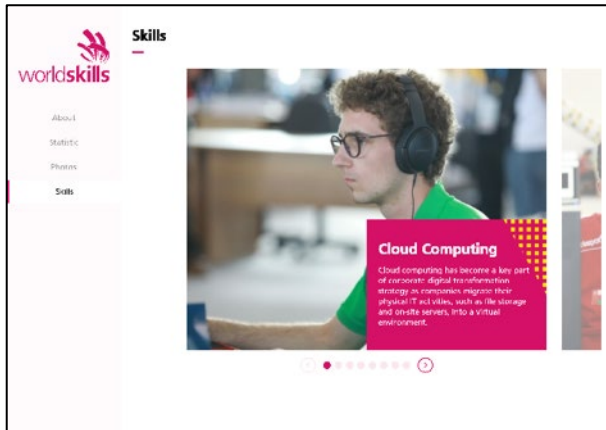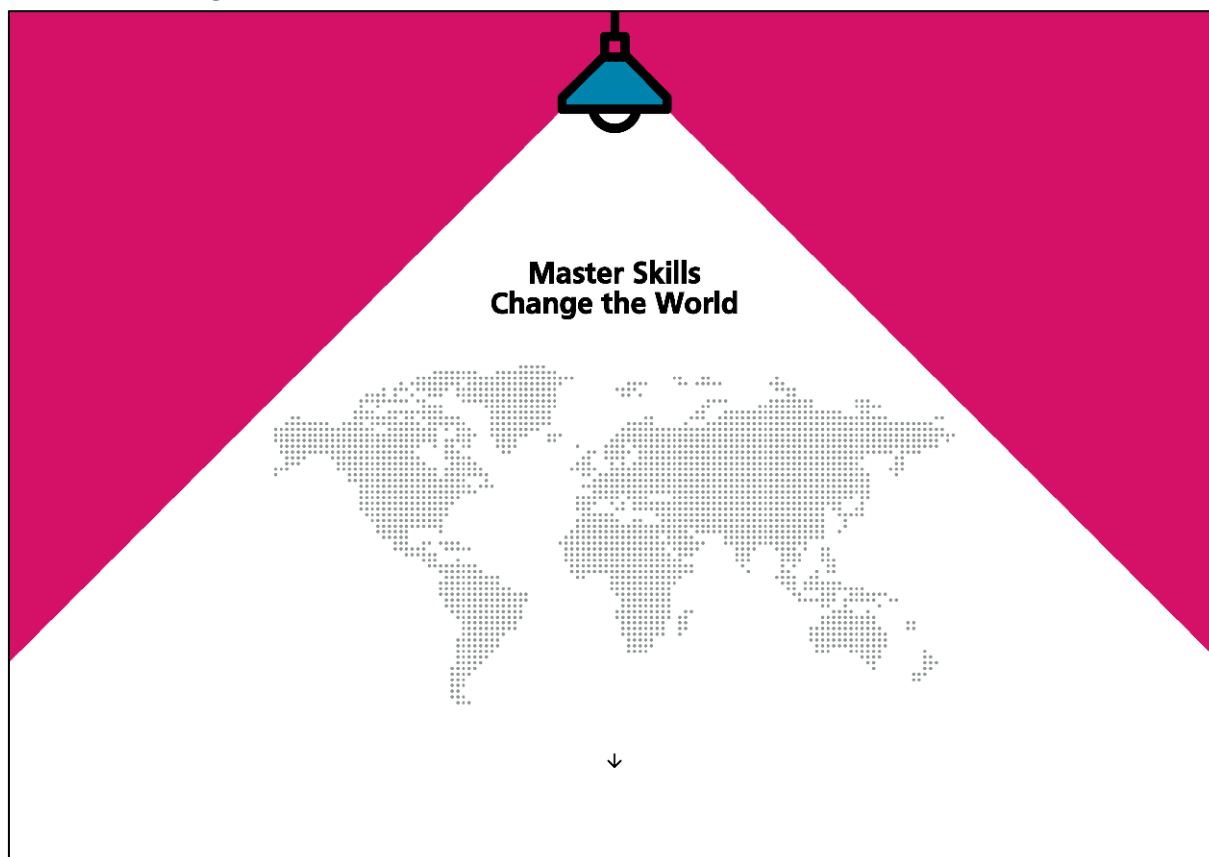

Skills

General Demands

- Show sidebar on all pages except welcome page:

    - Logo
    - Four links

        - About
        - Statistic
        - Photos
        - Skills

    - The link of current showing page should be highlighted.

- Click the link to navigate to the corresponding page.
- Pages can be changed by swipe up/down.
- All animation effects should be developed as same as the videos.
- Strictly follow the details of the prototypes.
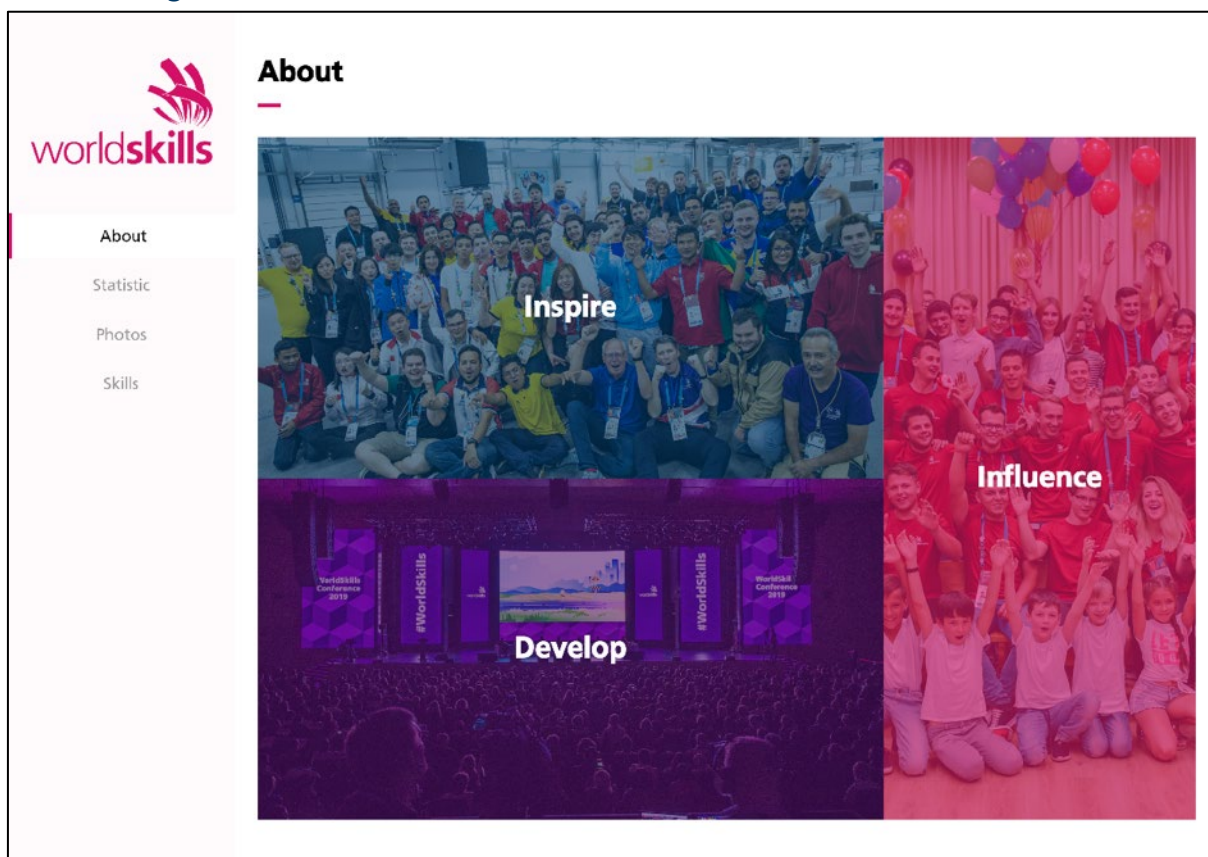
Pages Demands

1. Welcome Page

Elements include:

- Lamp
- Light from the lamp
- Title "Master Skills Change the World"
- Dotted map
- Down arrow

Function requirements:

- In the beginning, there is nothing in the page except pink background. When the page is loaded, a lamp appears from the top and then the lights come out. Title, dotted map and down arrow appear within the lamp light (*animations/welcome.mov*);
- The down arrow shows a bouncing animation;
- Users can swipe up to hide Welcome Page (*animations/swipe_up.mov*), then the welcome page will no longer be displayed except restart the app.
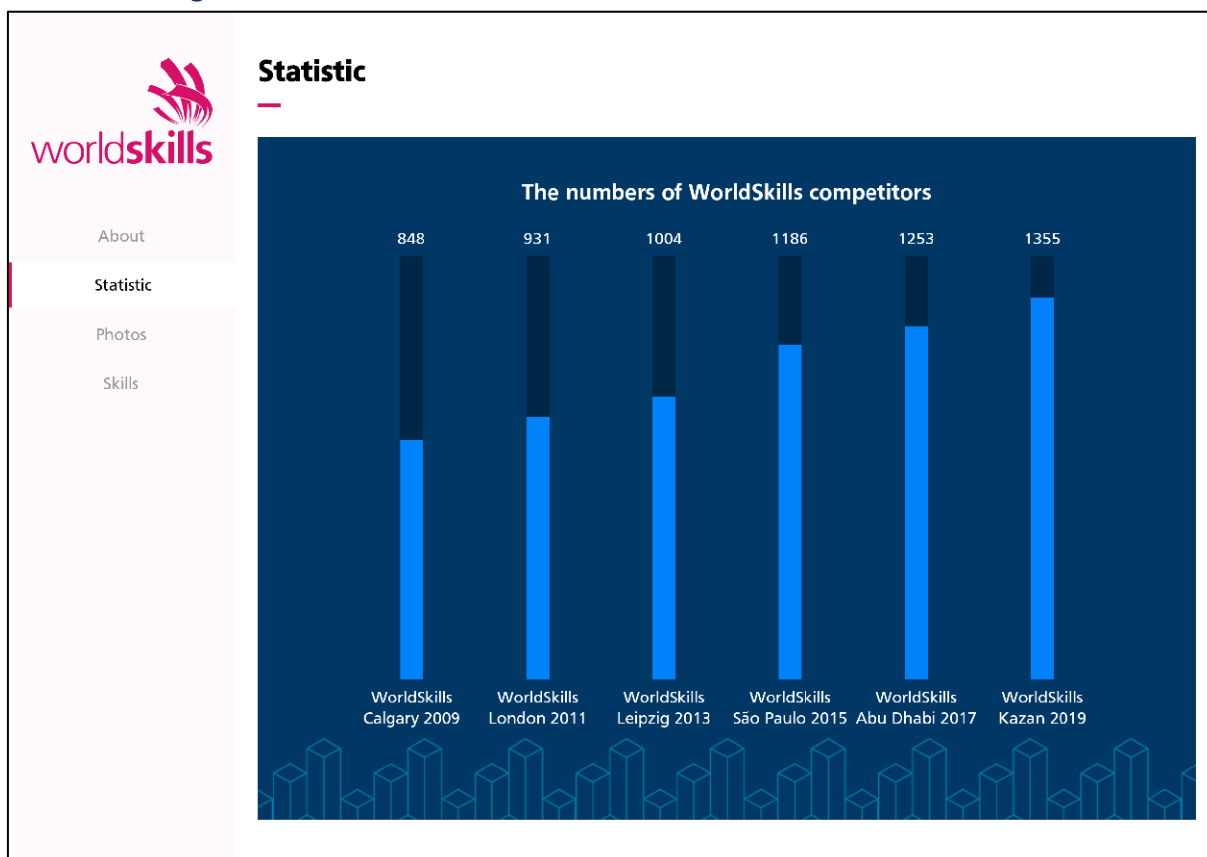
2. About Page

Elements include:

- Sidebar
- Title "About" with decoration line
- Three blocks

  - Title
  - Image with color filtered
  - Content(After block expanded)

Function requirements:

- Read the blocks data from *data/about.json*.
- Blocks expanding/shrinking animation needs to be implemented (*animations/about.mov*):

  - Blocks are shrank by default.
  - Click one of the default blocks:

    - Expand the block with animation.
    - Show content text with animation.
    - Keep the title and content text at the center of the block.

  - Click the expanded block:

    - Shrink the block back with animation.
    - Hide content text with animation.
    - Keep the title at the center of the block.

3. Statistic Page

Elements include:

- Sidebar
- Title "Statistic" with decoration line
- Diagram

    - Title
    - Background color & pattern
    - Statistic data

        - Number of competitors
        - Histogram
        - Competition name

Function requirements:

- Read the statistic data from *data/statistic.json*.
- Animations of statistic diagram (*animations/statistic.mov*):

    - Increase the displayed numbers from zero to the corresponding value.
    - Increase the height of the highlighted part of columns in the histogram from zero to the corresponding value.
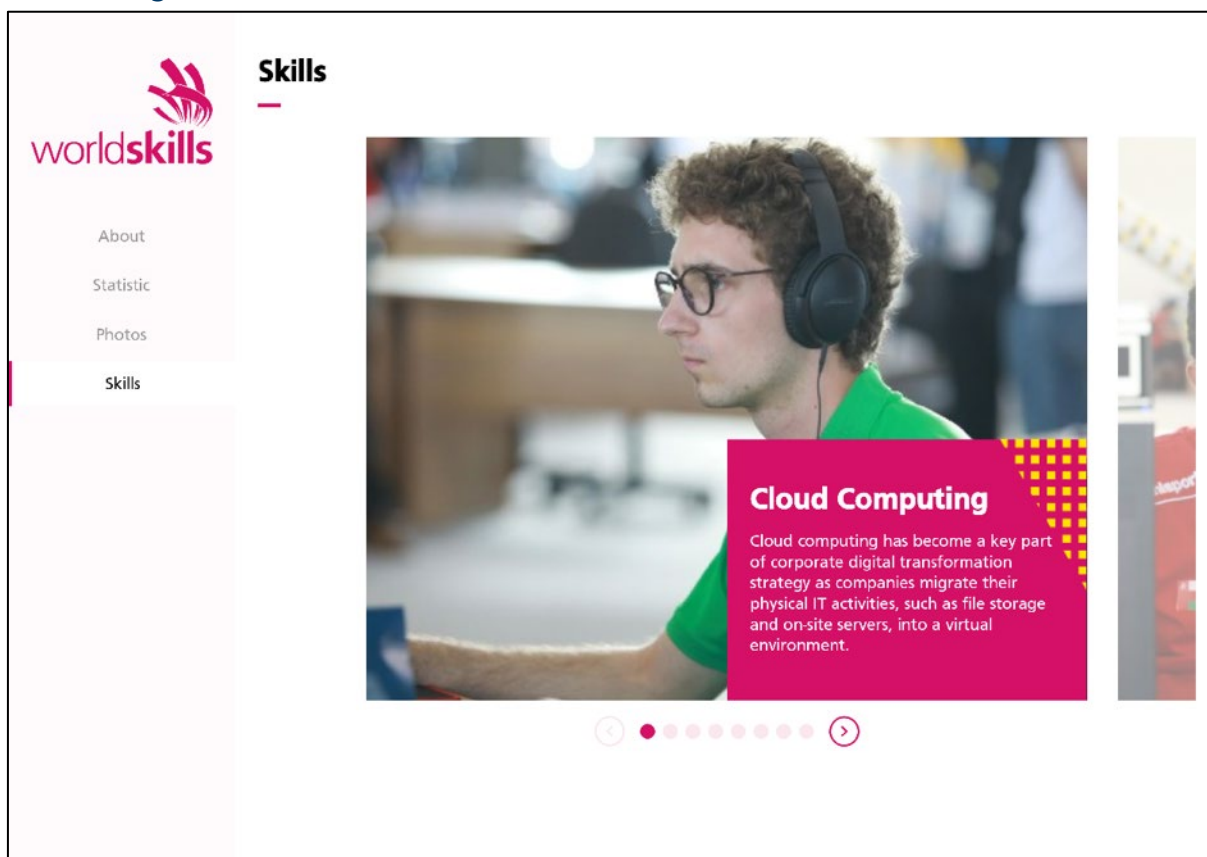
4. Photos Page

Elements include:

- Sidebar
- Title "Photos" with decoration line
- Photos

Function requirements (*animations/photos.mov*):

- Click a photo to pop up the expanded photo with zoom-in animation.
- Click Close icon button at the top right of the expanded photo to resume it with zoom-out animation.

5. Skills Page

Elements include:

- Sidebar
- Title "Skills" with decoration line
- Skills

    - Image
    - Title
    - Description
    - Background pattern

- Dots indicator

    - Left & right arrow icon button
    - Dots for each skill

Function requirements (*animations/skills.mov*):

- Read the skills data from *data/skills.json*.
- Show neighbor skills in translucence.
- Switch to neighbor skills in two ways:

    - Swipe left/right in skills showing area
    - Click left/right arrow icon button

- Highlight the dot for the current skill.
- Disable left/right arrow icon button when showing the first/last skill.

Instructions to the Competitor

1. Please create the project with correct package name (Android)/ Organization Identifier (iOS). Naming convention: edu.ws2022.cXX.pm;
2. You should save the project in the folder: XX_Module_C_PM;
3. You should rename the generated apk (Android)/ app (iOS) file as XX_Module_C_PM.apk (Android)/ XX_Module_C_PM.app (iOS), and save it in the root of the XX_Module_C_PM folder;
4. The whole XX_Module_C_PM folder should be pushed to the provided remote Git repository;
5. Submit part A.M. in the morning and part P.M. in the afternoon, and the two parts will be marked independently;
6. Only works pushed to the remote Git server within the specified time will be marked.

Note: XX refers to your workstation code.

Marking Scheme

Module C PM		
No.	Sub-criterion	Mark
1	Welcome Page	2.75
2	About Page	2.25
3	Statistic Page	1.5
4	Photos Page	1.75
5	Skills Page	2.25
6	General Demands	1.5
7	Judgement	3
	Total	15