

Project Title: The Rail Explorers

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Project Type: Single Year

## **Title of Project: The Rail Explorers**

### **Section I: Project Overview**

#### **A) Area of concern**

“The next phase from being a ‘Garden City’ is to make ourselves into a ‘City in a Garden’”, said Prime Minister Lee Hsien Loong during the opening of Gardens by the Bay (Lee, 2012). Developing Singapore into a garden city and changes in the country’s landscape lost nearly 73% of Singapore’s plants and animals over the past 200 years (Pickrell, 2003). Some Singaporeans felt that Singapore has suffered a great loss of culture and heritage as old historical buildings were demolished for new developments (Samdin and Cunico, 2017).

The Rail Corridor is rich in biodiversity and heritage, and connects many green spaces. It is home to historical buildings like Tanjong Pagar Railway Station. The National Parks Board (NParks) plans to develop the place, allowing the local community to enjoy its greenery, heritage and appreciate its role in conserving Singapore’s biodiversity (Rail Corridor website, 2017).

NParks formed the “Friends of Rail Corridor” group to get feedback on how to better enhance the Rail Corridor. As part of this group, we observed that resources to educate the public are lacking and outreach activities are required to support NParks’ cause. Thus, our group decided to raise the public’s awareness of Rail Corridor’s role in heritage and biodiversity conservation through creating useful resources to support NParks’ cause.

#### **B) Underlying problem**

Given the lack of public awareness of the Rail Corridor and its contribution to Singapore’s biodiversity and cultural heritage, how might we raise public awareness of such an important place and create resources to support the National Parks Board’s effort to educate the public so as to inform the public about the Rail Corridor and its role in the conservation of Singapore’s biodiversity and cultural heritage?

#### **C) Challenges identified**

1. We carried out a survey on the general public the survey results indicated that people are not aware of the Rail Corridor and the importance of biodiversity conservation.
2. At our meeting with NParks’ Project Manager, we understand that there are no resources to educate the public on the Rail Corridor and the importance of biodiversity conservation.

## **D) Solutions and Strategies**

To address our underlying problem, we adopted a two-pronged approach. The first involved creating educational resources to educate the public on biodiversity conservation and the Rail Corridor. The second is to reach out to the public to raise awareness through sharing at various public events. To date, resources we have created include an info-booklet, game and audio tour app and a game board. At the various outreach events, we used our resources to engage and educate the public on the importance of biodiversity conservation and raise their awareness of the Rail Corridor and what it has to offer in terms of nature and heritage. Details of strategies and actions are provided in the next section, Implementation of Plan of Action.

## **Section II: Implementation of Plan of Action**

**Our plan of action and its implementation are detailed in the table below. It consists of four phases based on our two-pronged approach to create educational resources and reach out to the community at various platforms.**

<b>Phases of project/Status</b>	<b>Actions</b>
<b>Phase 1: Planning</b> October 2017 - February 2018 (Completed)	<b>Understanding the Rail Corridor:</b> <ul style="list-style-type: none"><li>● Attended workshop at Rail Corridor by NParks in conjunction with opening of Rail Corridor Central</li><li>● Visited Rail Corridor to take photographs of flora, fauna and historical structures</li><li>● Researched history of Rail Corridor</li></ul>
January 2018 (Completed)	<b>Needs Analysis:</b> <ul style="list-style-type: none"><li>● Conducted survey to assess public's awareness of t Rail Corridor</li></ul>
February 2018 (Completed)	<b>Meeting NParks:</b> <ul style="list-style-type: none"><li>● Discussed how we can support NParks in the development of the Rail Corridor</li><li>● Decided on a two-pronged approach: create educational resources and carry out activities to engage the public</li></ul>
<b>Phase 2: Resource Creation</b> February - August 2018	<b>Resources we created:</b> <ul style="list-style-type: none"><li>a) <b>Info-booklet (completed)</b><ul style="list-style-type: none"><li>● Introduces history and biodiversity of the Rail Corridor</li><li>● Features native flora and fauna</li></ul></li></ul>

	<ul style="list-style-type: none"> <li>● Suggest activities to do at Rail Corridor</li> <li>● Educate the public on their role in biodiversity conservation</li> <li><b>b) Game App (completed)</b> <ul style="list-style-type: none"> <li>● Used software “Construct 3”</li> <li>● Created audio tour and game app to introduce Rail Corridor in a fun manner</li> </ul> </li> <li><b>c) Target Game Board (completed)</b> <ul style="list-style-type: none"> <li>● Engage visitors at outreach events</li> </ul> </li> <li><b>d) Tri-fold guide sheet (work in progress)</b> <ul style="list-style-type: none"> <li>● For Outdoor Education Branch, Ministry of Education</li> <li>● Contains map and information on Rail Corridor, featuring flora and fauna</li> <li>● To be launched in November 2018 by MOE</li> </ul> </li> <li><b>e) Rail Explorers Website (work in progress)</b> <ul style="list-style-type: none"> <li>● Set up website to share our resources with the public, expanding outreach.</li> </ul> </li> </ul>
<p><b>Phase 3: Outreach Activities</b> May 2018 - November 2018</p>	<p><b>Hwa Chong Institution Open House (completed)</b></p> <ul style="list-style-type: none"> <li>● Visitors learned about Rail Corridor through our game board and app</li> <li>● Displayed infographics about Rail Corridor</li> </ul> <p><b>NParks Bio-Blitz (completed)</b></p> <ul style="list-style-type: none"> <li>● Served as facilitators for the NParks guided walk at Rail Corridor</li> <li>● Identified dragonflies and butterflies with participants</li> <li>● Explained importance and need for biodiversity conservation</li> </ul> <p><b>NParks Festival of Biodiversity(completed)</b></p> <ul style="list-style-type: none"> <li>● Raised awareness of biodiversity conservation and introduced Rail Corridor using our target game board and app</li> </ul> <p><b>Kampung Senang’s Green and Healthy Festival (completed)</b></p> <ul style="list-style-type: none"> <li>● Shared project with guest of honour, Dr Lam Pin Min, Senior Minister of State (Ministry of Health and Transport)</li> <li>● Encouraged people to exercise at Rail Corridor.</li> <li>● Raise awareness of biodiversity conservation</li> </ul>

	<p><b>NParks Friends of Rail Corridor meeting (completed)</b></p> <ul style="list-style-type: none"> <li>● Shared our work with representatives from NParks, Urban Redevelopment Authority, Nature Society, students from local universities; and special guest Mr Desmond Lee, Minister for Social and Family Development and Second Minister in Ministry of National Development</li> <li>●</li> <li>● Suggested how Rail Corridor can be developed</li> </ul> <p><b>Ministry of Education Outdoor Adventure Learning Centre Open House (upcoming event)</b></p> <ul style="list-style-type: none"> <li>● Invited to share our work at event in November 2018</li> <li>● Launch of tri-fold guidesheet by MOE (see Phase 4 for details)</li> </ul>
<p><b>Phase 4: Collaboration with Ministry of Education (MOE)</b> July 2018 - November 2018</p>	<p><b>Establish Contact</b></p> <ul style="list-style-type: none"> <li>● Met at Friends of Rail Corridor Meeting</li> <li>● MOE outdoor branch expressed interest in our work</li> <li>● Assistant Director, Outdoor Education Branch, MOE, led her team to meet us, discussed improvements to be made to our resources</li> <li>● MOE requested us to create a tri-fold guidesheet for use in their outdoor education activities at Rail Corridor.</li> </ul> <p><b>Current Status</b></p> <ul style="list-style-type: none"> <li>● Improving resources and designing guidesheet.</li> </ul>

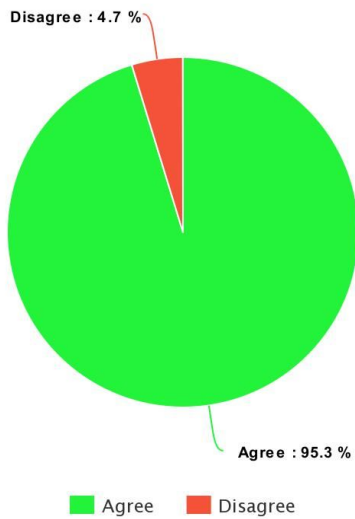
### Section III: Project Outcomes

#### A) Accomplishments

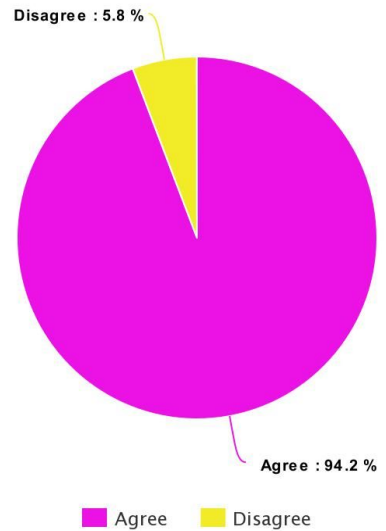
##### **Community Impact:**

At all outreach sessions, we gathered feedback on our work as seen in the figures that follow. Majority (95.3%) of respondents agreed that they learnt more about Rail Corridor and the importance of biodiversity conservation. Majority (94.2%) stated intentions to visit Rail Corridor.

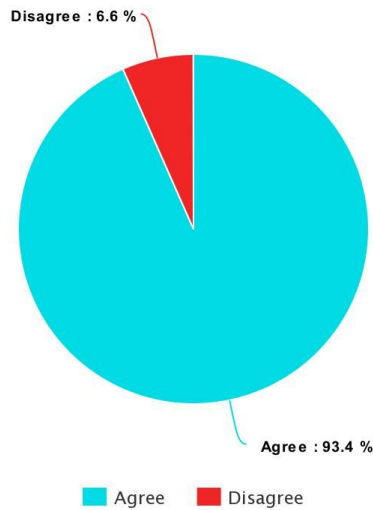
Did you learn more about the Rail Corridor and its importance of biodiversity conservation?



Are you keen to visit the Rail Corridor in the future?



Did the game and audio tour helped people know more about Rail Corridor?



meta-chart.com

We have also built a website to share the resources we made with the community at large. This reaches out to even more people to give them an idea of the Rail Corridor and the importance of biodiversity conservation in Singapore.

**Community Involvement:** We worked with NParks at their events to reach out to the public. At these events we shared information on the Rail Corridor and biodiversity conservation. We also used resources we created, namely audio tour and game app, info-booklet and target game board, to engage visitors.

We worked with Kampung Senang at the Green and Healthy Festival to promote biodiversity conservation and the Rail Corridor. We used our own resources to reach out to the public and engage the visitors.

We are currently working with the MOE's Outdoor Education Branch to refine our resources for use in their programmes with primary and lower secondary students. This will allow more students, to learn how to play their parts to protect the environment to conserve the biodiversity of Singapore. MOE will launch our resources at the open house of their Rail Corridor outdoor education centre in November 2018.

**Resolution of Area of Concern/UP:** Through our various outreach events, we were able to explain to the public about the importance of biodiversity conservation and the Rail Corridor. This helps NParks in their cause of heritage and biodiversity conservation, as well as educate the public.

Educational resources we created have enabled the public to understand more about issues concerned in a fun and interesting way, using visual and audio cues. Our continuing work with the MOE will educate more students on the importance of biodiversity conservation and how they can do their part with greater sustainability at the national level.

## **B) Reflections**

Initially, we did not know much about Rail Corridor. Thus, we travelled multiple times to the Rail Corridor to research on various plants, animals, and historic buildings spotted at Rail Corridor to create our resources.

Creating game app took much more time than expected as it was new to us. We sourced for a user-friendly software and referenced other relevant sources to create the app, enabling us to complete the design.

During outreach events, we had to engage people of all ages. We had to learn how to communicate effectively with them, including elderly who were more comfortable conversing in Mandarin.

We had to ensure that our games appealed to all and were not too challenging to motivate players to finish the game and enjoy the learning experience.

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