

**Project Design Phase-II**  
**Customer/user journey map**

Date	08 October 2022
Team ID	PNT2022TMID00088
Project Name	Emerging methods for early detection of forest fire
Maximum Marks	4 Marks

# User journey

by the Design Team of Accuturn Interactive NL

People  
2-9

Time  
30 min

Difficulty  
Beginner

Creating a user journey is a quick way to help you and your team gain a deeper understanding of who you're designing for and the stakeholders in your project. The information you add here should be representative of the observations and research you've done about your users. <sup>(1)</sup>

Phases	Analyze the problem	To detect forest fire	To build a forest fire detection model and test it	To inform the users about the fire and to take necessary steps
Steps	<div>Fire can be analyzed by continuously monitoring the forest</div> <div>To examine the wind speed</div> <div>To study about the temperature in the forest</div>	<div>By installing various sensors</div> <div>By fixing surveillance camera</div> <div>By monitoring the abandoned areas</div>	<div>Collecting various datasets</div> <div>Writing codes for building the algorithm</div> <div>Testing the model</div>	<div>By informing the forest officer through message</div> <div>By using fire alarms</div> <div>Information given by the people around the forest</div>
Feelings	<div>Detecting the fire helps to save various species</div> <div>It helps to increase oxygen level in air</div> <div>Medicinal plants can be preserved</div> <div>Forest fire causes air pollution</div> <div>Forest fire can cause various health issues</div> <div>Poisonous gases can be mixed in atmosphere</div>	<div>Timely response can be taken which feels safe</div> <div>Tribes can feel happy by detecting the fire</div> <div>Detection of fire can help to increase the vegetation in forest</div> <div>Animals can migrate into the human areas</div> <div>Many forest lands are burned</div> <div>There may be a chance of extinction of endangered species</div>	<div>The model helps to predict fire at the earliest</div> <div>The model helps to minimize the cost for fire extinguishing</div> <div>The model helps to alert the correct people at definite time</div> <div>The model can give false positives about the fire</div> <div>Building and testing the model is an difficult task</div> <div>Sometimes sensors may fail to work</div>	<div>Informing about the fire can be able to take necessary actions</div> <div>By informing about the fire the forest officers can feel</div> <div>Can inform the location of fire to the people</div> <div>Occasionally information may be delayed</div> <div>High risk of false information</div> <div>Information shared among the people can be mistakenly understood</div>
Pain points	<div>Analyzing about the environment is an difficult task</div> <div>We cannot rely on the environment because it changes everytime</div> <div>It can lead to erosion</div>	<div>Detection of forest fire is inefficient</div> <div>Power consume to detect forest fire is high</div> <div>Forest fire detection has less accuracy</div>	<div>Mistakes may be done in the programming</div> <div>Dataset collection is a difficult task</div> <div>Cost for testing the model may be high</div>	<div>Forest fire causes irreparable damage</div> <div>Forests are usually remote so they are difficult to manage</div> <div>Dry leaves and parching woods can act as fuel source that causes fire</div>
Opportunities	<div>Watch towers can be installed at a particular distance</div> <div>Fire detection using optical smoke detection</div> <div>Lightning detectors can be used which detect the coordinates of the strikes</div>	<div>Infrared cameras can be installed</div> <div>Spotter planes can give the exact location of forest fire</div> <div>Information about the forest fire can be given through mobile phones</div>	<div>High fire pixels cameras are used</div> <div>High accurate model can be trained</div> <div>By approaching the government to take necessary steps to detect forest fire</div>	<div>Early detection and prediction of forest fire can be made</div> <div>The forest fire detection model should give high accuracy</div> <div>The model should classify the real time data predicting the chances of fire</div>