



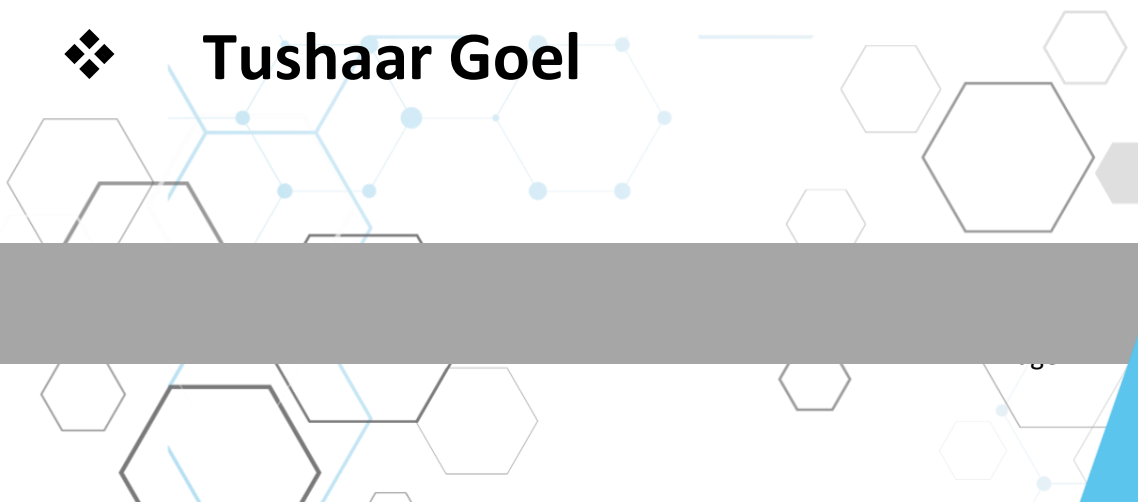
FA4 PROJECT

Stellar - Self Drive Car Rentals In India



Our Team:

- ❖ Tanush Kumar
- ❖ Ujjwal
- ❖ Sunishtha
- ❖ Tushaar Goel



PROJECT DETAILS

Group Name	Group 03											
Project Title	Stellar - Self Drive Car Rentals In India											
Team Leader	Ujjwal, Roll No: 2010991754											
Details of Work division	<table><tr><th>Student / Roll No</th><th>Work / Role Allotted</th></tr><tr><td>Tanush Kumar / 2010991746</td><td>Web Developer</td></tr><tr><td>Ujjwal / 2010991754</td><td>Web Developer</td></tr><tr><td>Sunishtha / 2010991739</td><td>Frontend Developer</td></tr><tr><td>Tushaar Goel / 2010991750</td><td>Frontend Developer</td></tr></table>		Student / Roll No	Work / Role Allotted	Tanush Kumar / 2010991746	Web Developer	Ujjwal / 2010991754	Web Developer	Sunishtha / 2010991739	Frontend Developer	Tushaar Goel / 2010991750	Frontend Developer
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High level Approach to be followed:	1) Stellar is essentially a self-drive car rental and purchasing online marketplace, which allows its users to rent or buy self-drive cars at affordable prices throughout the nation as well as outside the nation.											

	<p>2) Our Aim: Stellar's first and only priority is to promote automation in the transportation sector. Making automation no longer just a luxury for rich, rather a necessary essential for everyone.</p> <p>3) Why do this?</p> <p>a) Greater Road Safety: According to a Stanford Law School report, at least 90% of all motor vehicle crashes are caused fully or in part by human error. Automation can help reduce the number of crashes on our roads.</p> <p>b) Fewer traffic jams will save fuel and electric vehicles will reduce greenhouse gases from needless idling.</p> <p>c) People with disabilities, like the blind, are capable of self-sufficiency, and highly automated vehicles can help them live the life they want.</p> <p>4) How we plan to achieve this:</p> <p>a) For countries like India where per capita income low, 80% of the population is unable to purchase such kind of vehicles and moreover the manufacturing of</p>
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	<p>such kind of vehicles in the country is limited, forcing people to import them from other countries. Here in this situation, Stellar comes with its self-drive car rental services at such low cost that a average person can easily afford, helping in giving the people a little push that they require towards automation.</p> <p>5) Our website consists of 7 pages - home, contact, shop, product page, about , inventory and login page.</p> <p>Inside</p> <ul style="list-style-type: none"> a) Home page consists of information about the website, recently added car models, top models, client's reviews, some selected clients that we've worked with, and a section to get in touch with the members in case of any issue. b) Shop page consists of various car models which are available. c) Product page consists of a interactive interface where the user can customize the selected car of their choice d) About page consists of information about the website.
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	<ul style="list-style-type: none"> e) Contact page consists of the address of our main center, and various other details through which client can get in touch with us. f) Login page to login to an already registered account or sign up in case of a new user. g) Inventory section to save all the customized orders.
Lower level Approach to be followed:	<ul style="list-style-type: none"> 1) Site's Structure: <ul style="list-style-type: none"> a) As described before, Stellar is essentially a car rental site but in addition to that, stellar also provides it's costumers with choice of purchasing the vehicles permanently, which in a sense makes it's structure similar to that of a e-commerce site. b) The site has been divided into a number of different sections, compromising of a variety of languages, libraries and APIs. 2) Following is the list of all the things that are used for the site: <ul style="list-style-type: none"> a) Languages Used: <ul style="list-style-type: none"> i) HTML: HTML is used to make up the basic layout and structure for the entire website.

	<p>ii) CSS: For styling the structure made by html css is used making visually appealing.</p> <p>iii) Javascript: Javascript is used as the main programming language for the site.</p> <p>b) Libraries Used:</p> <p>i) JQuery: It is a feature-rich JavaScript library, and is used add some additional functionality.</p> <p>ii) Font Awesome: For fonts and Icons</p> <p>iii) Swiper.js: Is a a javascript library used to add 3d swipe effect in certain sections.</p> <p>iv) Flickity: Flickity is used add interactive slide sections.</p> <p>c) APIs Used:</p> <p>i) MapBox: Used to to add a interactive map.</p> <p>3) Site structure in details(Page by Page):</p> <p>a) Home page :-</p> <p>(1)Header Section :- Header Section first of all contains the navbar at the top of the page having its position as fixed whose background gets changed on scrolling to</p>
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	<p>make the background material readable and visible , it consists all of the link tags to the other pages along with the logo of the website. Then, it has a sub-section with class mainheading-head which contains a picture of a car with some specification of it and the website name and a heading line with a button which navigates the user to the Shop/Products Page.</p> <p>(2)About Section :- This section has a brief introduction about Stellar.</p> <p>(3)Recently Added :- This section consists some of our recently added products to our site. This section uses swiper.js and also having autoplay option to each swiper-slide.</p> <p>(4)Our Top Models :- This Section contains some top models which users liked much and which are having</p>
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	<p>the top features rather than other.</p> <p>(5)World Wide Branches :- This Section contains a world map having some marked locations showing our available branches available outside of India. Map uses mapbox API to fetch the map .</p> <p>(6)What We Do :- This parts has details about us that what user can expect from our side , what we can provide and what services they can get from our side.</p> <p>(7)Then, there are two sections about our client's reviews and some of our selected clients that we work with.</p> <p>(8)Counters :- This section has 4 counters showing some numbers what we achieved , we got and our world-wide branches count. All counters starts when the user scrolls up to this section and based on pure javascript.</p>
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	<p>(9)Footer Section :- This section is having all the info by which an user can connect with us directly . It is having the main branch address , social handles , support mail-id , some contact numbers and a option to get user subscribed to us to get every update about us directly by mail.</p> <p>(10) Stellar Watermark :- Stellar watermark can also be seen at the bottom left corner which is having its position as fixed.</p> <p>(11) Social Section :- This section contains all our social media handles where we are , it is also fixed position and having a cool border animation on hover.</p> <p>b) Shop Page :-</p> <p>(1)NavBar :- The navbar is at the top of the page having its position as fixed it consists all of the link tags</p>
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	<p>to the other pages along with the logo of the website.</p> <p>(2) All the individual car items are show vertically with a nice scroll snap style property , each of the item is having a full screen image of its car item , its model name two buttons first to navigate to the model page and second is to navigate the user to its existing inventory to get the user notified about the products he/she added earlier.</p> <p>(3)Each product image gets changed on resizing the window to a mobile size.</p> <p>c) Individual Item's Page :-</p> <p>i) Top Section :-</p> <p>(1)There is an individual item page for every item that is available on the Shops page and also shown in the home window.</p> <p>(2)NavBar :- The navbar is at the top of the page having its position as fixed it consists all of the link tags to the other pages along with the logo of the website.</p>
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	<p>ii) Left Section :-</p> <p>(1)Carousel :- A carousel at the left of the website is present to show some slides with pictures of the current car item and some videos showing some of the cool automative features of it . It uses flickity javascript slider library. User can also change the slides by using left and right arrow keys on keyboard. Each image gets changed accordingly whenever the user chooses any filter i.e., paint color , interior color and wheels . This carousel gets disappeared for a mobile device and the images are shown between the other details given in the website and a main image also gets displayed on the top.</p> <p>iii) Right Section :-</p> <p>(1)First of all , the right section contains an info about the availability of a reward , then it has the model name its estimated delivery</p>
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	<p>months/time if user orders or takes on rent it today.</p> <p>(2)Below the estimated delivery div , it has a section with a gilder by which user can find the purchasing price or the price if he/she takes it on rent , on rental charges there is a dropdown also appears below the pricing checkboxes to get the details of the user about for what timing he/she wants to take it on rent . This section also has counters which gets started when the window loads and also when the user changes the plan or type of the specification he requires , on choosing plaid or plaid+ option a div also gets displayed showing the extra feature they can get if they choose the following plan.</p> <p>(3)Paints Section :- This section contains the paints available for the car the user wants , on clicking on any paint the carousel images get changed</p>
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	<p>accordingly with a smooth transition effect.</p> <p>(4)Wheels Section :- This section contains the wheel types available for the car the user wants , on clicking on any wheel the carousel images get changed accordingly with a smooth transition effect.</p> <p>(5)Interior Section :- This section contains the interior's colors available for the car the user wants , on clicking on any color the carousel images get changed accordingly with a smooth transition effect.</p> <p>(6)Then there is a section showing the main automatic features available in the product and a cool feature that is going to come in the upcoming year.</p> <p>(7) At Last , there is a section from where the user can place order for the car he wants to purchase or take on rent.</p> <p>d) About Page :-</p>
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	<p>(1)NavBar :- The navbar is at the top of the page having its position as fixed it consists all of the link tags to the other pages along with the logo of the website.</p> <p>(2)This page consists the information about our company , Stellar , what we do , our goals , feature and all about us .</p> <p>e) Contact Page :-</p> <p>(1)NavBar :- The navbar is at the top of the page having its position as fixed it consists all of the link tags to the other pages along with the logo of the website.</p> <p>(2)This page has our main branch address , support mail id , customer-care phone number and links to all our social media handles. Also there is a section to send a direct message to us as , feedback , any reviews or anything else that any person wants to share with us .</p> <p>f) Sign Up / Log In Page :-</p>
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	<p>(1)NavBar :- The navbar is at the top of the page having its position as fixed it consists all of the link tags to the other pages along with the logo of the website.</p> <p>(2)This page has the option for the use to get signed up to the site or log in to his/her existing account. Login / Sign Up options using google or facebook account are also available , there is also a little animation applied to the icons present before every input field .All of our social handles can also be seen here.</p> <p>g) MapBox API :- Inside the home page , we have used MapBox API to generate the world map. Inside the map , there is an option also to locate the user on map at his/her current location for which we have used javascript's geolocation api to get the current co-ordinates of the user. Some branches are also marked upon the map using Marker() inside the mapboxgl class. Zoom in , Zoom out feature across the map , by</p>
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	<p>which user can effectively interact with map .</p>
<p>Advantage of the project with applicability:</p>	<ol style="list-style-type: none"> 1. Firstly, the goal is to remove the possibility for human error on the roads, and improve safety as approximately 94 percent of all the accidents are directly or indirectly caused by human errors. 2. As the number of on road self-drive vehicles will increase, traffic jams will be less of a problem due to interactive nature of these vehicles with kind. It will save fuel and electric vehicles will reduce greenhouse gases from needless idling. 3. People with disabilities, like the blind, are capable of self-sufficiency, and highly automated vehicles can help them live the life they want. 4. For countries like India where per capita income is low, 80% of the population is unable to purchase such kind of vehicles and moreover the manufacturing of such kind of vehicles in the country is limited, forcing people to import them from other countries. Here in this situation, Stellar comes with its self-drive car rental services at

	such low cost that a average person can easily afford, helping in giving the people a little push that they require towards automation.	
Schedule for implementing the use case: <ul style="list-style-type: none">● Share the Tentative Date of Completion of Expected Deliverables	Deliverable	Expected Date of Completion
	Planning and idea finalization	1 Feb 2021 - 22 Feb 2021 (Completed)
	Template finalized	08 Apr. 2021
	Work Distribution	04 Mar. 2021
	Work started	12 Apr. 2021
	Testing	22 Apr. 2021
	Maintenance	24 Apr. - 08 May 2021
	Online Deployment	10 th June 2021 (expected to be deployed online)

<p>Future scope of the project</p> <ul style="list-style-type: none"> • Share the details in points 	<ol style="list-style-type: none"> 1. As the transportation industry slowly starts making progress towards electric transportation, we can expect more growth and bright car rental business opportunities. 2. In the near future we can also expect shared car rentals as driverless cars will also dramatically increase transportation efficiency, because they do not need to be parked - they can constantly be in use by different individuals
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Live Preview :-

<https://ujjwalsk.github.io/stellar/>

DOCUMENT HISTORY:

Created By	<ol style="list-style-type: none">1. Ujjwal, 2010991754, Group: G-29, Department of Computer Science and Engineering, Chitkara University, Punjab2. Tushaar Goel, 2010991750, Group: G-29, Department of Computer Science and Engineering, Chitkara University, Punjab3. Tanush Kumar, 2010991746, Group: G-29, Department of Computer Science and Engineering, Chitkara University, Punjab4. Sunishtha, 2010991739, Group: G-29, Department of Computer Science and Engineering, Chitkara University, Punjab
Approved By	Dr. Srikanta Kumar Mohapatra, Chitkara University of Engineering and Technology, Chitkara University, Punjab
Months of Creation	1st Feb - 10th may