**HoverGames First Flyers checklist and General Documentation template**

**----------------------------------------Your input starts here-----------------------------------------**

**Task 1) General documentation template:**

Please fill out this template and post your submission into your [self-created subdirectory (e.g.](https://teams.microsoft.com/_" \l "/files/Submissions%20First%20Flyers?threadId=19%3A657e4786ed1c4e2692cafe01b6d6226f%40thread.skype&ctx=channel) *[Team Harry Hoverpig](https://teams.microsoft.com/_" \l "/files/Submissions%20First%20Flyers?threadId=19%3A657e4786ed1c4e2692cafe01b6d6226f%40thread.skype&ctx=channel)*[).](https://teams.microsoft.com/_" \l "/files/Submissions%20First%20Flyers?threadId=19%3A657e4786ed1c4e2692cafe01b6d6226f%40thread.skype&ctx=channel) Please feel free to re-use content from your application on Hackster where applicable.

1. **Please name every participant. Please mark those who are not NXP. Optionally note the roles of each of the participants.**

*Soheil Bahrami (NXP engineer): Digital Hardware Architect*

*Mahmoud Sherrah (NXP engineer): Software Engineer*

1. **Project title:**

*FlyingFox*

1. **Please give a one-sentence elevator pitch on your project**  
   *An autonomous drone with AI vision and IoT connectivity, able to assist fire brigade members in identifying potential victims of fire breakouts during and after dispatch time.*
2. **State Bill of material. Highlight any interesting use of additional components**

* *DroneHoverGames drone kit KIT-HGDRONEK66*
* *Companion Computer: Coral Dev board featuring NXP iMX8M processor and Google Edge TPU co-processor supporting TensorFlow Lite ML models*
* *OL2385 Sigfox development board by NXP*
* *Logitech HD USB Webcam*
* *Power distribution connectors (XT60 connector – based)*
* *USB Hub*

1. **Please introduce your full story: How does your drone help fight fires?**  
   Highlight any interesting use of additional software or hardware. Note a detailed project enabling one thing is just as valuable as a larger generic project. Wrap a story around it.

*The project story revolves around autonomous real-time camera-based information gathering and sharing to fire brigade members on the outbreak of fire. The drone is stationed at a commercial or residential site and can be triggered to start a mission upon reception of a trigger by the fire alarm system. The autonomous robust quadcopter drone is equipped with an HD camera and a powerful on-board artificial intelligence component – Google Edge TPU - which is able to quickly identify human gestures and instantly sends a summary of the gathered information through the Sigfox network to the fire brigade members from the first moments of occurrence of an emergency.*

*The full concept is detailed in the project description document available on our GitHub repository,Teams submission as well as the Hackster.io page:*

<https://www.hackster.io/sobahrami/flyingfox-821a16>

1. **If available, please provide any schematics. Also share CAD files if created into your submission folder on teams.**  
   *A high-level component diagram is included in the project description document on our GitHub repository, Teams submission and Hackster.io page referred above.*
2. **Please share a link to your bitbucket repository**  
   <https://bitbucket.sw.nxp.com/users/nxf35042/repos/flyingfoxrepo/browse>

**----------------------------------------Your input ends here-----------------------------------------**