

# PSV Project

## Context

PSV did a project for the last two years called the Brainbox. This was a small space inside the PSV stadium with some high-end technology like tablets and virtual reality glasses where they invited certain people to test new tech innovations that improve the stadium experience. A lot of these apps did not work well and because of the High costs they removed these special seats.

Now they want a mobile application that serves as a test application to test “fan engagement modules” these modules are functions like chant recognition, AR players in the stadium and a lot more.

When modules get 80% success rate inside the test app it must be exported to the real “PSV application”.

These modules must be:

1. Easy to build (plug and play).
2. Easy to import in the test application.
3. Easy to export inside the real application.

## Goal:

How can we help PSV with testing and gathering feedback from new fan engagement apps in one central native mobile application before, they go public on the real PSV application.

## Design challenge

Tag	Attributes
<Form of solution>	Native mobile application, plugin system.
<Users>	PSV test users, App developers.
<Context>	A mobile application.
<Perform activity>	Integrate modules, export modules, test modules, vote on tested modules.
<Target performance>	Ease of use, security.

## Main design challenge

How to design and build a native mobile application that enables app developers to integrate their modules into the application and that enables PSV test users to test those modules, with ease of use and security in mind.

## Sub design challenges

### Sub design challenge 1:

Tag	Attributes
<form of solution>	Native mobile application

Which native solutions is best for testing the integrated modules?

- Must work together with the current PSV app.

### Sub design challenge 2:

Tag	Attributes
<form of solution>	Plugin system
<Users>	App developers
<Perform activity>	Integrate modules
<Target performance>	Ease of use

How to make a plugin system that enables app developers to easily intergrade their modules inside the test app.

- Defined plugin template for new modules.
- Module should be plug and play.

### Sub design challenge 3:

Tag	Attributes
<Form of solution>	Native mobile application
<Perform activity>	Test modules, vote on modules
<Users>	PSV Test users

How to make a native mobile application that enables PSV test users to test and vote on modules?

- Passed module is 80%+ votes.

### Sub design challenge 4:

Tag	Attributes
<Form of solution>	Native mobile application
<Perform activity>	Test modules, vote on modules
<Users>	PSV Test users

How to gather useful feedback for the PSV innovation staff, out of the test users on a native mobile application?

- Not just star or thumbs up rating.

<b>Sub Design Challenge:</b>	<b>Which native solutions is best for testing integrated modules?</b>
<b>Research pattern:</b>	Choose fitting technology
<b>Research strategies and methods:</b>	Library: Expert interview Field: Problem analysis Lab: Hardware validation Showroom: Pitch Workshop: Prototype
<b>Description</b>	<p>Because our application must also work together with the current PSV app it is necessary to get more information about the current app. An expert interview with the developers can help us gather more information about the current app.</p> <p>We know the context of the application.</p> <p>When we know a native solution, we also have to validate if all the native function are working as intended.</p> <p>When we have figured out all the problems and have found a proper native solution, we want to pitch this to PSV.</p> <p>When we agree we make a prototype to validate our choices.</p>

<b>Sub Design Challenge:</b>	<b>How to make a plugin system that enables app developers to easily intergrade their modules inside the test app.</b>
<b>Research pattern:</b>	
<b>Research strategies and methods:</b>	Library: Available products analysis Workshop: Prototype Lab: a,b testing Showroom: Pitch
<b>Description</b>	<p>First, we start with library research to gather information on how a plugin system work. And if it is possible to make it in the programming language we choose in sub design challenge 1.</p> <p>After that we are going to make a prototype to validate the gathered information.</p> <p>With this prototype we want to do a full testing cycle with other programmers to validate the ease of use.</p>

	If the prototype is a success, we will pitch it to the stakeholders.
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<b>Sub Design Challenge:</b>	<b>How to make a native mobile application that enables PSV test users to test and vote on modules?</b>
<b>Research pattern:</b>	
<b>Research strategies and methods:</b>	
<b>Description</b>	

<b>Sub Design Challenge:</b>	<b>How to gather useful feedback for the PSV innovation staff, out of the test users on a native mobile application?</b>
<b>Research pattern:</b>	Realize as required
<b>Research strategies and methods:</b>	Field: Workshop Lab: Showroom: Pitch
<b>Description</b>	