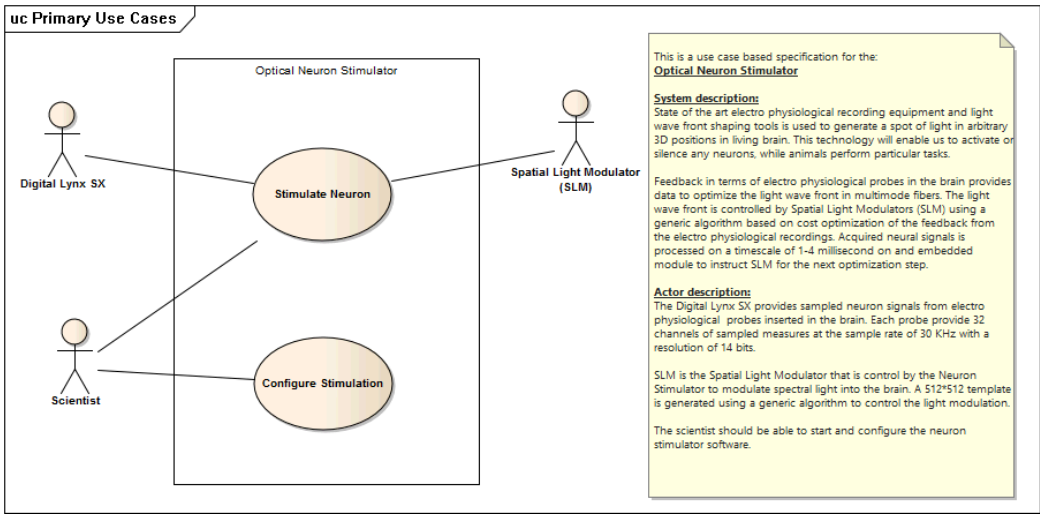
Use Case Scenario Report

Package: Use Case Model

Diagram: Primary Use Cases



Use Case:	Configure Stimulation			Use Case Id:	
Status:	Proposed	Version:	1.0	Phase:	1.0
Author:		Created:	20-11-2005	Modified:	20-05-2017

Notes:

1. User select active neuron channel
2. User select channels to be stored in files

Possible to select 1-32 channels

Related To:	**Source**	**Connector**	**Target**
	Use Case Model.Scientist	*Association*	Use Case Model.Configure Stimulation

Use Case:	Stimulate Neuron			Use Case Id:	
Status:	Proposed	Version:	1.0	Phase:	1.0
Author:		Created:	19-11-2005	Modified:	20-05-2017

Notes:

1. User starts neuron stimulator
2. System starts to store neuron channel data in files based on configuration
3. System measure recursive average values on each channel
4. System computes a new SLM template using the generic algorithm
5. System starts and sends a new template to SLM
6. System sets start point for collect neuron channel data
7. System turns laser beam on
8. System finds maximum peak on each channel,
   calculated as absolute peak subtracted measured average value
9. Systems turns laser beam off after 4 ms
9. System calculate cost, computed as difference between active channel
   and channel with measured maximum peak
10. System insert new template in SLM templates if cost is bigger than
    any template in the list of SLM templates

Related To:

Source	Connector	Target
Use Case Model.Digital Lynx SX	*Association*	Use Case Model.Stimulate Neuron
Use Case Model.Stimulate Neuron	*Association*	Use Case Model.Spatial Light Modulator (SLM)
Use Case Model.Scientist	*Association*	Use Case Model.Stimulate Neuron