Contents

1 exType Theory

Built: 05 March 2019
Parent Theories: indexedLists, patternMatches

1.1 Definitions

[APP_def]

$\vdash$ $(\forall l.$ APP [] l = $l) \wedge \forall h\ l_1\ l_2.$ APP $(h::l_1)\ l_2$ = $h::$APP $l_1\ l_2$

[Map_def]

$\vdash$ $(\forall f.$ Map f [] = []$) \wedge \forall f\ h\ l.$ Map f $(h::l)$ = $f\ h::$Map $f\ l$

1.2 Theorems

[LENGTH_APP]

$\vdash \forall l_1\ l_2.$ LENGTH (APP $l_1\ l_2$) = LENGTH l_1 + LENGTH l_2

[Map_APP]

$\vdash$ Map f (APP $l_1\ l_2$) = APP (Map $f\ l_1$) (Map $f\ l_2$)

Index